

# new art laboratories





Veterinary rapid tests Point-of-care devices



Customer number: .....

Contact person: .....

# We are here for you:



tamavet@nal-vonminden.com



www.tamavet-diagnostics.com



+49 (0)941 290 10-0

# We help you care!



# Contents

General information	
Veterinary rapid tests	6
Overview	6
Dogs	7
Cats	
Cattle	
Pigs	21
Horses	24
Urine analysis strips	27
Point-of-care devices	29
Urinalysis	

# nal von minden

# Your partner for professional diagnostics

# **Competitive and innovative**

For over 35 years, nal von minden GmbH has been offering products of the highest quality, a comprehensive portfolio and excellent customer service in the field of medical diagnostics and drug analytics. Our many years of experience and close ties with our customers has enabled us to expand and refine our portfolio to meet your requirements. As it is our goal to support you in your daily work, we place a great deal of importance on both individual consultation and high-quality, user-friendly products. Our ISO certification and quality management system in accordance with ISO 9001 and ISO 13485 is further testament to our dedication to quality.

# The nal von minden all-round service

We operate from 8 different locations throughout Europe, looking after customers worldwide and are always looking for ways to improve our service. Our all-round service is part of this, offering comprehensive, personal consultation, a seamless ordering process and fast delivery. If required, we would also be happy to visit you personally for an in-depth consultation and to present our portfolio to you. We also welcome your feedback regarding the expansion of our range and the refinement of our processes.

# **Veterinary point-of-care diagnostics**

We are also a reliable partner in the field of veterinary medicine. Our innovative and high-quality tamaVet<sup>®</sup> product series offers you a wide range of veterinary point-of-care diagnostics with an outstanding price-performance ratio for simple and efficient testing.

As your long-term partner, we don't just want to satisfy your needs – we want to inspire you too!





nal von minden tamaVet®

# **Overview of veterinary rapid tests**

Product code	Species	Product	Detection	Sensitivity	Specifity
1172031N-05	Dogs	Canine Heartworm (CHW)	Dirofilaria immitis	94.1	99.9
1172032N-05	Dogs	Canine Distemper Virus (CDV)	Canine Distemper Virus	94.9	98.5
1172033N-05	Dogs, cats	Parvovirus	Parvovirus	92.3	95.7
1172034N-05	Cats	Feline Immunodeficiency Virus (FIV)	FIV	98.5	99.9
1172035N-05	Cats	Feline Leukaemia Virus (FeLV)	FeLV	95.8	99.9
1172020105	Cata		FeLV	95.8	99.9
11/203010-05	Cats	IVIUIU Z IA	FIV	98.5	99.9
1172037N-05	Dogs, cats	Coronavirus	Coronavirus	96.2	95.7
11720201 05	Dega esta		Coronavirus	96.2	95.7
11/203810-05	Dogs, cats	IVIUIU 21B	Parvovirus	92.3	95.7
1172041N-05	Dogs	Leishmania	Leishmania infantum	90.9	96.0
1172042N-05	Dogs	Ehrlichia canis	Ehrlichia canis	94.1	95.2
1172043N-05	Dogs, cats	Giardia	Giardia lamblia	96.0	97.2
1172046N-05	Dogs	Lyme borreliosis	Borrelia burgdorferi	95.8	94.1
1172050N-05	Cattle, pigs, horses	Rotavirus	Rotavirus	96.4	95.5
1172000105			Rotavirus	96.4	95.5
117206010-05	Cattle, pigs, norses	Multi 21C	Clostridium perfringens	95.6	99.0
			Rotavirus	96.4	95.5
1172061N-05	Pigs	Multi 3TA	Clostridium perfringens	95.6	99.0
			Cryptosporidium parvum	99.9	95.9
			Rotavirus	96.4	95.5
117206201 05	Cattle		Coronavirus	99.9	99.9
117206210-05	Cattle	Multi 4 IA	Escherischia coli K99	88.9	99.9
			Cryptosporidium parvum	99.9	95.9
1172063N-05	Horses	Tetanus	Tetanus antibodies/ vaccination status	95.8	92.3
1172064N-05	Horses	Equine IgG	IgG	95.0	92.6
1172065N-05	Cattle	Bovine IgG	IgG	99.9	93.2
117306711 05	Dess este		Giardia lamblia	96.0	97.2
11/206/N-05	1172067N-05 Dogs, cats Multi 2TD		Cryptosporidium parvum	99.9	95.9



# **Veterinary rapid tests** Dogs

Canine Heartworm (CHW)				
Product	Sample material	Test time	Pack size	Product code
tamaVet <sup>®</sup> Canine Heartworm (CHW) Test	Whole blood, serum, plasma	10 min	5 test cassettes	1172031N-05

The tamaVet<sup>®</sup> Canine Heartworm (CHW) Test is intended for the rapid detection of specific *Dirofilaria immitis* antigens in the whole blood, serum or plasma of dogs.

Heartworm disease, also known as dirofilariasis, is caused by the *Dirofilaria immitis* parasite of the *Onchocercidae* family. Transmitted by mosquitoes, it mainly affects dogs, but can sometimes also occur in cats. Mosquitoes are responsible for its transmission. As the disease initially develops in the subcutis, mild or newly occuring infections often go unnoticed. As the pre-adult form reaches the vascular system and adult female dirofilaria develops in the pulmonary arteries, symptoms such as inflammation, loss of appetite, lethargy, weight loss, a chronic cough and even heart failure can develop. The entire development cycle in the mosquito and primary host takes at least 5 or 6 months, meaning that female adult antigens can be detected – at the earliest – 6 to 7 months after infection occurs.

The test is suitable for the early detection of suspected heartworm disease or in the case of clinical symptoms, and should be repeated after treatment to confirm the elimination of the parasite.

# Canine Distemper Virus (CDV) Product Sample material Test time Pack size Product code tamaVet® Canine Distemper Virus (CDV) Conjunctiva swab, serum, urine, faeces 10 min 5 test cassettes 1172032N-05

The tamaVet<sup>®</sup> Canine Distemper Virus (CDV) Test is used for the rapid detection of canine distemper antigens in serum, urine, faeces or conjunctival swabs in dogs.

The disease is caused by canine distemper virus, which belongs to the *Paramyxoviridae* family. Transmission tends to be intrauterine or as a result of direct contact. The disease is highly contagious, affects multiple organs and infects not only pet dogs but also ferrets, skunks and other local carnivorous wildlife. It can manifest as acute, subacute or chronic, and can occur in cutaneous, catarrhal, gastrointestinal or nervous forms. In rare cases, 'hard pad disease' can develop, causing hyperkeratosis of the rhinarium and foot pads. Damage to tooth enamel also affects some dogs. The detection of antigens is usually possible with the onset of viraemia approximately 7 days after infection.

The test is suitable for use in the early detection of suspected distemper or in the case of clinical symptoms.



Canine Parvovirus / Feline Panleukopenia Virus				XX
Product	Sample material	Test time	Pack size	Product code
tamaVet <sup>®</sup> Parvovirus Test	Faeces	10 min	5 test cassettes	1172033N-05

The tamaVet<sup>®</sup> Parvovirus Test is intended for the rapid detection of specific canine and feline parvovirus antigens in faecal samples taken from dogs and cats.

Both canine parvovirus (CPV2, 2a, 2b, 2c) and feline panleukopenia virus (FPV) belong to the *Parvoviridae* family. Transmission is usually oral or intrauterine. Both CPV and FPV are highly contagious and most often acute infections (also known as 'panleukopenia' in cats). As the viruses depend on cells with a high rate of mitosis, they primarily attack intestinal cells, bone marrow, lymphatic tissue and myocardial cells. In puppies and kittens in particular, this can lead to severe systemic illness resulting initially in acute fever, watery/bloody diarrhoea, vomiting, anorexia and leucopenia followed by extreme dehydration and azotaemia, anaemia, hypoalbuminaemia and even panhypoproteinaemia. In rare cases, sudden death as a result of cardiovascular failure can occur, even without previous clinical signs. The detection of antigens is usually possible from the 3rd day and correlates with clinical symptoms.

The test is suitable for the early detection of suspected infection with parvovirus or in the case of clinical symptoms in dogs and cats.

Coronavirus				XX
Product	Sample material	Test time	Pack size	Product code
tamaVet <sup>®</sup> Coronavirus Test	Faeces	10 min	5 test cassettes	1172037N-05

The tamaVet<sup>®</sup> Coronavirus Test is intended for the rapid detection of specific canine and feline coronavirus antigens in the faecal samples of dogs and cats.

Canine coronavirus (CCoV) and feline coronavirus (FCoV) both belong to the *Coronaviridae* family and occur worldwide. The infections tend to be transmitted orally. Coronaviruses demonstrate high recombination and mutation rates, which fosters new variants. Many infections are subclinical in dogs and cats, or cause only mild intestinal symptoms such as diarrhoea. Infections with clinical manifestations, primarily in puppies, kittens and other young animals, include apathy and anorexia, diarrhoea, dehydration, fever and, more rarely, heavily bloodied diarrhoea and even death. Its severity and duration in dogs and cats also depends on simultaneous parasitosis and mixed infections. The development of

feline infectious peritonitis (FIP) is a fatal manifestation of an infection that only affects cats. The activation of macrophages and the complement system leads to inflammation of the vascular system and necrosis, with leakage of serum and proteins into the body cavities and fibrin deposition (effusive or wet form). A milder, more prolonged form without exudate may also occur, with nodular sites of inflammation in the organs (noneffusive or dry form). Clinical symptoms include anorexia and cachexia, as well as a recurrent fever that does not respond to treatment. The detection of antigens is usually possible around 3 to 14 days after infection.

The test is suitable for the early detection of suspected infection with coronavirus or in the case of clinical symptoms. As the excretion of coronavirus can be intermittent, repeated testing is recommended.

Multi 2 TB Coronavirus, Parvovirus / Panleukopenia Virus				XX
Product	Sample material	Test time	Pack size	Product code
tamaVet® Multi 2TB Test Coronavirus, Parvovirus	Faeces	10 min	5 test cassettes	1172038N-05

The tamaVet<sup>®</sup> Multi 2TB (Coronavirus, Parvovirus) Test is intended for the rapid detection of specific canine and feline coronavirus and parvovirus antigens in the faecal samples of dogs and cats.

Both canine coronavirus (CCoV) and feline coronavirus (FCoV) belong to the *Coronaviridae* family and occur worldwide. The infection tends to be transmitted orally. Both canine parvovirus (CPV2, 2a, 2b, 2c) and feline panleukopenia virus (FPV) belong to the *Parvoviridae* family, and transmission is usually oral or intrauterine.

As mixed infections often have similar symptoms such as apathy, anorexia, diarrhoea, dehydration and fever, a combination of both tests is recommended. Antigens can usually be detected approximately 3 to 14 days after infection.

The test is suitable for the early detection of suspected infection with coronavirus and parvovirus or in the case of clinical symptoms. As the excretion of parvovirus decreases, and the excretion of coronavirus can be intermittent, the test should be repeated after 2 days.

Leishmania infantum				
Product	Sample material	Test time	Pack size	Product code
tamaVet <sup>®</sup> Leishmania Test	Whole blood, serum, plasma	10 min	5 test cassettes	1172041N-05

The tamaVet<sup>®</sup> Leishmania Test is intended for the rapid detection of specific antibodies against *Leishmania infantum* in the whole blood, serum or plasma of dogs.

The protozoan *Leishmania infantum* belongs to the *Trypanosomatida* order, and is primarily transmitted by mosquitoes of the sandfly (*Phlebotomus*) genus. The pathogens attack macrophages, especially in the skin and reticulolymphatic organs. The course of the disease can vary depending on the animal's immune system reaction. Animals with stimulation of cell-mediated immunity can develop resistance, whereas stimulation of humoral immunity can lead to non-protective antibodies and the formation of immune complexes. In this way, animals can

either remain free of symptoms for life, or initially show extremely diverse symptoms such as fever, enlarged lymph nodes, weight loss, apathy, vomiting, diarrhoea and changes to the skin. As it progresses, it also affects the organs. The skin exhibits scaly alopecia, various forms of dermatitis, brittle claws, necrosis and itching. The development of immune complex diseases in other organs is also possible. The detection of antibodies in infected animals is only possible in some cases after 6 to 8 weeks and, in subclinical cases, only several years later.

The test is suitable for the early detection of leishmaniasis in suspected cases or in the case of clinical symptoms, and repeated testing may be recommended.



Ehrlichia canis				
Product	Sample material	Test time	Pack size	Product code
tamaVet <sup>®</sup> Ehrlichia canis Test	Whole blood, serum, plasma	10 min	5 Test cassettes	1172042N-05

The tamaVet<sup>®</sup> Ehrlichia canis Test is intended for the rapid detection of specific antibodies against *Ehrlichia canis* in the whole blood, serum or plasma of dogs.

The bacterium *Ehrlichia canis* belongs to the *Rickettsiales* order, and is transmitted by the brown dog tick (*Rhipicephalus sanguineus*). Canine monocytic ehrlichiosis (CME) caused by this pathogen can be acute, subclinical or chronic. A monocyte infestation suppresses immune function and can cause mild to life-threatening symptoms such as leukocytopenia, thrombocytopenia, dyspnoea, fever, vomiting, epistaxis, haemorrhagic diathesis, lymphadenopathy, weight loss and apathy. Symptoms

affecting the central nervous system have also been documented. The subsequent subclinical phase can last for weeks or years, and in the chronic stage bleeding, oedema, pancytopenia, hyperglobulinaemia, splenomegaly and immune complex diseases can also occur. The detection of antibodies is possible from the 7th day after infection, but seroconversion can also take up to four weeks.

The test is suitable for the early detection of suspected infection with canine monocytic ehrlichiosis or in the case of clinical symptoms. If necessary, repeating the test is recommended.

Giardia lamblia				XX
Product	Sample material	Test time	Pack size	Product code
tamaVet <sup>®</sup> Giardia Test	Faeces	10 min	5 test cassettes	1172043N-05

The tamaVet<sup>®</sup> Giardia Test is intended for the rapid detection of specific *Giardia lamblia* antigens in the faecal samples of dogs and cats.

Giardiasis is a disease caused by the unicellular parasite *Giardia lamblia* (also known as *duodenalis/intestinalis*). Infection with pathogen cysts by oral absorption mainly takes place following environmental contamination with faeces and reinfection during grooming. After the cysts have been ingested, trophozoites are released into the gastrointestinal tract and adhere to small intestinal cells where they multiply by dividing into two. This leads to villous atrophy and the desquamation of epithelial cells with resulting malabsorption and maldigestion. The trophozoites in the rectum then form cysts again.

Giardia infections are often asymptomatic in dogs and cats, though persistent and intermittent diarrhoea with light-coloured, foul-smelling faeces with mucus and blood admixtures can occur – especially in puppies, kittens and other young animals. Vomiting is less common. A loss of appetite and emaciation can happen in acute to chronic cases. The period between infection and the excretion of trophozoites and cysts is 4 to 15 days.

The test is suitable for the early detection of suspected *Giardia lamblia* or in the case of clinical symptoms. As excretion can be intermittent, examinations should be carried out over a period of approximately 7 to 10 days and be repeated if necessary.

Borrelia burgdorferi				
Product	Sample material	Test time	Pack size	Product code
tamaVet <sup>®</sup> Canine Lyme Borreliosis Test	Whole blood, serum, plasma	10 min	5 test cassettes	1172046N-05

The tamaVet<sup>®</sup> Canine Lyme Borreliosis Test is intended for the rapid detection of specific antibodies against *Borrelia burgdorferi* in the whole blood, serum or plasma of dogs.

The Borrelia burgdorferi bacterium belongs to the Spirochaetales order and is primarily transmitted by the castor bean tick (*Ixodes ricinus*). Pathogens actively migrate from the dog's skin to tissues and joints. A red rash (*Erythema migrans*) can occur as a result. As well as asymptomatic infections, non-specific symptoms such as fever, anorexia and apathy can occur, sometimes with relapses. Lameness due to arthritis or myositis and lymphadenopathy may develop later, whereas glomerulonephritis, myocarditis or neurological impairments are less frequently noted. Lyme-specific antibodies sometimes first occur 2 to 6 weeks after infection.

The test is suitable for the early detection of suspected Lyme borreliosis (Lyme disease) in dogs, and in such cases should be repeated after an interval of 7 to 10 days.

Multi 2TD Giardia, Cryptosp	ooridium parvum			
Product	Sample material	Test time	Pack size	Product code
tamaVet <sup>®</sup> Multi 2TD Test Giardia, Cryptosporidium parvum	Faeces	10 min	5 test cassettes	1172067N-05

The tamaVet<sup>®</sup> Multi 2 TD (Giardia, Cryptosporidium parvum) Test is intended for the rapid detection of specific *Giardia lamblia* and *Cryptosporidium parvum* antigens in faecal samples taken from dogs and cats.

Giardiasis is a disease caused by the single-cell parasite *Giardia lamblia* (also known as *duodenalis/intestinalis*). Infection with pathogen cysts by oral absorption mainly takes place following environmental contamination with faeces and reinfection during grooming. The protozoan *Cryptosporidium parvum* belongs to the phylum *Apicomplexa* and forms infectious oocysts. The infection is normally transmitted orally. As with *Giardia lamblia* cysts, the uptake of cryptosporidia oocysts leads to the release of sporozoites that attack the intestinal enterocytes and

multiply in different stages, eventually releasing very environmentally stable oocysts. As with giardiasis, this can lead not only to malabsorption and maldigestion, but also to abdominal pain, vomiting and fever. In immunosuppressed animals in particular, or in puppies and kittens, potentially fatal diarhhoea can occur. In the case of *Giardia lamblia*, the time from infection to the excretion of trophozoites and cysts is 4 to 15 days, and 2 to 14 days in the case of *Cryptosporidium parvum*.

The test is suitable for the early detection of suspected *Giardia lamblia* and *Cryptosporidium parvum*, or in the case of clinical symptoms. As excretion is intermittent, examinations should be carried out over a period of approximately 4 to 10 days and repeated as necessary.



# Veterinary rapid tests Cats



Canine Parvovirus / Feline Panleukopenia Virus				XX
Product	Sample material	Test time	Pack size	Product code
tamaVet <sup>®</sup> Parvovirus Test	Faeces	10 min	5 test cassettes	1172033N-05

The tamaVet<sup>®</sup> Parvovirus Test is intended for the rapid detection of specific canine and feline parvovirus antigens in faecal samples taken from dogs and cats.

Both canine parvovirus (CPV2, 2a, 2b, 2c) and feline panleukopenia virus (FPV) belong to the *Parvoviridae* family. Transmission is usually oral or intrauterine. Both CPV and FPV are highly contagious and most often acute infections (also known as 'panleukopenia' in cats). As the viruses depend on cells with a high rate of mitosis, they primarily attack intestinal cells, bone marrow, lymphatic tissue and myocardial cells. In puppies and kittens in particular, this can lead to severe systemic illness resulting initially in acute fever, watery/bloody diarrhoea, vomiting, anorexia and leucopenia followed by extreme dehydration and azotaemia, anaemia, hypoalbuminaemia and even panhypoproteinaemia. In rare cases, sudden death as a result of cardiovascular failure can occur, even without previous clinical signs. The detection of antigens is usually possible from the 3rd day and correlates with clinical symptoms.

The test is suitable for the early detection of suspected infection with parvovirus or in the case of clinical symptoms in dogs and cats.

# Feline Immunodeficiency Virus (FIV)

· · · · · · · · · · · · · · · · · · ·				
Product	Sample material	Test time	Pack size	Product code
tamaVet <sup>®</sup> Feline Immunodeficiency Virus (FIV) Test	Whole blood, serum, plasma	10 min	5 test cassettes	1172034N-05

The tamaVet<sup>®</sup> Feline Immunodeficiency Virus (FIV) Test is intended for the rapid detection of specific antibodies against the FIV-associated proteins p24 and gp41 in the whole blood, serum or plasma of cats. The feline immunodeficiency virus belongs to the *Retroviridae* family, and is usually transmitted through a bite.

In the acute or primary phase of the infection, which can last for days or weeks, young animals in particular experience lymphadenopathy and neutropenia as a result of the multiplication of the virus in T lymphocytes. This is often in conjunction with a fever. In the subsequent asymptomatic carrier phase, which can last months or years, no clinical symptoms are present. This is followed by a phase of numerous occurrences of secondary infections, known as AIDS-related complex (ARC). Symptoms affect the respiratory system and oral cavity, as well as the digestive tract. In the terminal phase (feline AIDS), anaemia, anorexia, pancytopenia and further secondary infections can be added to the list of symptoms. The detection of antibodies is possible from birth , though these may be maternal antibodies, and in the acute phase of infection the test may yield negative results. In the case of infection, detection is possible after approximately 8 to 12 weeks.

The test is suitable for the detection of antibodies against the FIV-associated proteins p24 and gp41 in the case of suspected infection or clinical symptoms. Positive tests in cats under 6 months old should be repeated after 6 to 8 months. It is generally advised to repeat the test after approximately 8 to 12 weeks.



Feline Leukaemia Virus (FeLV)				<u> </u>
Produkt	Sample material	Test time	Pack size	Product code
tamaVet <sup>®</sup> Feline Leukaemia Virus (FeLV) Test	Whole blood, serum, plasma	10 min	5 test cassettes	1172035N-05

The tamaVet<sup>®</sup> Feline Leukaemia Virus (FeLV) Test is intended for the rapid detection of feline leukaemia virus p27 (core protein) antigens in the whole blood, serum or plasma of cats.

The feline leukaemia virus belongs to the *Retroviridae* family, and can be transmitted vertically or, more commonly, through direct contact. Once it has taken hold, the virus multiplies in four stages, beginning in the local lymphatic tissue and progressing to viraemia. In addition to multiplication in the spleen, lymph nodes and lymphatic tissue, it can also multiply in the bone marrow and epithelial cells, or even result in persistent viraemia. In the case of a regressive infection, the immune system is able to overcome the infection – however, the cat remains infected and in some cases resistance can develop. In the case of persistent viraemia, progressive infection can

result in illness. The primary symptoms include tumours (such as lymphosarcomas, thymus or intestinal leukosis), neuropathies and reproductive disorders. Degenerative and immunosuppressive effects facilitate the onset of FeLV-associated diseases, the symptoms of which vary greatly. Chronic rhinitis or gingivitis, the slowed healing of wounds, pyodermia and a susceptibility to infections are all typical. The p27 antigen is produced during the early viraemic phase, approximately 14 to 30 days after infection, as well as during all subsequent stages.

The test is suitable for the rapid detection of feline leukaemia virus p27 antigens in the case of suspected infection or in the case of clinical symptoms, as well as for testing animals with an unknown immunisation status. If necessary, repeating the test is recommended.

# Multi 2TA · FeLV, FIV

Product	Sample material	Test time	Pack size	Product code
tamaVet <sup>®</sup> Multi 2TA Test · FeLV, FIV	Whole blood, serum, plasma	10 min	5 test cassettes	1172036N-05

The tamaVet<sup>®</sup> Multi 2TA (FeLV, FIV) is intended for the rapid detection of feline leukaemia virus p27 antigens (core protein) as well as specific antibodies against FIV-associated proteins p24 and gp41 in the whole blood, serum or plasma of cats.

Both viruses belong to the *Retroviridae* family. Feline leukaemia virus can be transmitted vertically or, more commonly, through direct contact, whereas feline immunodeficiency virus is usually transmitted by bites. As both infections have degenerative and immunosuppressive effects which can lead to similar secondary infections with comparable symptoms, it is recommended to combine both tests. The feline leukaemia virus p27 antigen is produced during the early viraemic phase, approximately 14 to 30 days after infection, as well as in all subsequent stages. The detection of antibodies against FIV-associated proteins p24 and gp41 is possible from birth, though these may be maternal antibodies, and in the acute phase of infection the test can be negative. Infection is detectable after approximately 8 to 12 weeks.

The test is suitable for the detection of feline leukaemia virus p27 antigens as well as antibodies against the FIV-associated proteins p24 and gp41 in the case of suspected infection or clinical symptoms. If necessary, repeating the test is recommended.

Coronavirus				MX
Product	Sample material	Test time	Pack size	Product code
tamaVet <sup>®</sup> Coronavirus Test	Faeces	10 min	5 test cassettes	1172037N-05

The tamaVet<sup>®</sup> Coronavirus Test is intended for the rapid detection of specific canine and feline coronavirus antigens in the faecal samples of dogs and cats.

Canine coronavirus (CCoV) and feline coronavirus (FCoV) both belong to the *Coronaviridae* family and occur worldwide. The infections tend to be transmitted orally. Coronaviruses demonstrate high recombination and mutation rates, which fosters new variants. Many infections are subclinical in dogs and cats, or cause only mild intestinal symptoms such as diarrhoea. Infections with clinical manifestations, primarily in puppies, kittens and other young animals, include apathy and anorexia, diarrhoea, dehydration, fever and, more rarely, heavily bloodied diarrhoea and even death. Its severity and duration in dogs and cats also depends on simultaneous parasitosis and mixed infections. The development of

feline infectious peritonitis (FIP) is a fatal manifestation of an infection that only affects cats. The activation of macrophages and the complement system leads to inflammation of the vascular system and necrosis, with leakage of serum and proteins into the body cavities and fibrin deposition (effusive or wet form). A milder, more prolonged form without exudate may also occur, with nodular sites of inflammation in the organs (noneffusive or dry form). Clinical symptoms include anorexia and cachexia, as well as a recurrent fever that does not respond to treatment. The detection of antigens is usually possible around 3 to 14 days after infection.

The test is suitable for the early detection of suspected infection with coronavirus or in the case of clinical symptoms. As the excretion of coronavirus can be intermittent, repeated testing is recommended.

Multi 2 TB Coronavirus, Parvovirus / Panleukopenia Virus				
Product	Sample material	Test time	Pack size	Product code
tamaVet <sup>®</sup> Multi 2TB Test Coronavirus, Parvovirus	Faeces	10 min	5 test cassettes	1172038N-05

The tamaVet<sup>®</sup> Multi 2TB (Coronavirus, Parvovirus) Test is intended for the rapid detection of specific canine and feline coronavirus and parvovirus antigens in the faecal samples of dogs and cats.

Both canine coronavirus (CCoV) and feline coronavirus (FCoV) belong to the *Coronaviridae* family and occur worldwide. The infection tends to be transmitted orally. Both canine parvovirus (CPV2, 2a, 2b, 2c) and feline panleukopenia virus (FPV) belong to the *Parvoviridae* family, and transmission is usually oral or intrauterine.

As mixed infections often have similar symptoms such as apathy, anorexia, diarrhoea, dehydration and fever, a combination of both tests is recommended. Antigens can usually be detected approximately 3 to 14 days after infection.

The test is suitable for the early detection of suspected infection with coronavirus and parvovirus or in the case of clinical symptoms. As the excretion of parvovirus decreases, and the excretion of coronavirus can be intermittent, the test should be repeated after 2 days.



Giardia lamblia				XX
Product	Sample material	Test time	Pack size	Product code
tamaVet® Giardia Test	Faeces	10 min	5 test cassettes	1172043N-05

The tamaVet<sup>®</sup> Giardia Test is intended for the rapid detection of specific *Giardia lamblia* antigens in the faecal samples of dogs and cats.

Giardiasis is a disease caused by the unicellular parasite Giardia lamblia (also known as duodenalis/intestinalis). Infection with pathogen cysts by oral absorption mainly takes place following environmental contamination with faeces and reinfection during grooming. After the cysts have been ingested, trophozoites are released into the gastrointestinal tract and adhere to small intestinal cells where they multiply by dividing into two. This leads to villous atrophy and the desquamation of epithelial cells with resulting malabsorption and maldigestion. The trophozoites in the rectum then form cysts again. Giardia infections are often asymptomatic in dogs and cats, though persistent and intermittent diarrhoea with light-coloured, foul-smelling faeces with mucus and blood admixtures can occur – especially in puppies, kittens and other young animals. Vomiting is less common. A loss of appetite and emaciation can happen in acute to chronic cases. The period between infection and the excretion of trophozoites and cysts is 4 to 15 days.

The test is suitable for the early detection of suspected *Giardia lamblia* or in the case of clinical symptoms. As excretion can be intermittent, examinations should be carried out over a period of approximately 7 to 10 days and be repeated if necessary.

# Multi 2TD Giardia, Cryptosporidium parvum

Product	Sample material	Test time	Pack size	Product code
tamaVet <sup>®</sup> Multi 2TD Test Giardia, Cryptosporidium parvum	Faeces	10 min	5 test cassettes	1172067N-05

The tamaVet<sup>®</sup> Multi 2 TD (Giardia, Cryptosporidium parvum) Test is intended for the rapid detection of specific *Giardia lamblia* and *Cryptosporidium parvum* antigens in faecal samples taken from dogs and cats.

Giardiasis is a disease caused by the single-cell parasite Giardia lamblia (also known as duodenalis/intestinalis). Infection with pathogen cysts by oral absorption mainly takes place following environmental contamination with faeces and reinfection during grooming. The protozoan *Cryptosporidium parvum* belongs to the phylum *Apicomplexa* and forms infectious oocysts. The infection is normally transmitted orally. As with *Giardia lamblia* cysts, the uptake of cryptosporidia oocysts leads to the release of sporozoites that attack the intestinal enterocytes and multiply in different stages, eventually releasing very environmentally stable oocysts. As with giardiasis, this can lead not only to malabsorption and maldigestion, but also to abdominal pain, vomiting and fever. In immunosuppressed animals in particular, or in puppies and kittens, potentially fatal diarhhoea can occur. In the case of *Giardia lamblia*, the time from infection to the excretion of trophozoites and cysts is 4 to 15 days, and 2 to 14 days in the case of *Cryptosporidium parvum*.

The test is suitable for the early detection of suspected *Giardia lamblia* and *Cryptosporidium parvum*, or in the case of clinical symptoms. As excretion is intermittent, examinations should be carried out over a period of approximately 4 to 10 days and repeated as necessary.

# Veterinary rapid tests Cattle





Rotavirus				
Product	Sample material	Test time	Pack size	Product code
tamaVet <sup>®</sup> Rotavirus Test	Faeces	10 min	5 test cassettes	1172050N-05

The tamaVet<sup>®</sup> Rotavirus Test is intended for the rapid detection of specific rotavirus antigens in faecal samples taken from cattle, pigs and horses.

Rotavirus belongs to the *Reoviridae* family and has numerous different serotypes. The infection is generally transmitted via the faecal-oral route. In addition to asymptomatic infections, rotaviruses are the main pathogens that cause severe gastrointestinal diseases, especially in young animals of various species. The virus infects the enterocytes in the microvilli and, after a short incubation period (12 hours to approximately 3 days), leads to drastic electrolyte shifts in the intestinal epithelium and to the death of cells with resulting malabsorption, caused in part by the enterotoxin NSP4. The consequences can include severe diarrhoea accompanied by extreme dehydration. Rotaviruses are amongst the most common pathogens that cause neonatal calf diarrhoea (NCD). The detection of antigens is usually possible with the onset on clinical symptoms, as excretion of the virus reaches a peak shortly after the start of the illness and then decreases.

The test is suitable for the early detection of suspected rotavirus or in the case of clinical symptoms in cattle, pigs and horses.

# Multi 2TC · Rotavirus, Clostridium perfringens

Product	Sample material	Test time	Pack size	Product code
tamaVet® Multi 2TC Test Rotavirus, Clostridium perfringens	Faeces	10 min	5 test cassettes	1172060N-05

The tamaVet<sup>®</sup> Multi 2TC (Rotavirus, Clostridium perfringens) Test is intended for the rapid detection of specific rotavirus and *Clostridium perfringens* antigens in faecal samples taken from cattle, pigs and horses.

Rotavirus belongs to the *Reoviridae* family and has numerous different serotypes. The infection is generally transmitted via the faecal-oral route. The bacteria *Clostridium perfringens* belongs to the *Clostridiales* order and is often found in the digestive tract of healthy animals or ingested orally. Disease caused by *Clostridium perfringens* is associated with increased proliferation in the intestine and the formation of various toxins. The absorption of these toxins into the blood can lead to enterotoxaemia. The animals exhibit severe and sometimes bloody diarrhoea and are even at risk of potential death resulting from shock. As symptoms resemble those of rotaviruses and mixed infections, this test combination is recommended. The detection of rotavirus antigens is usually possible with the onset of clinical symptoms, as excretion of the virus reaches a peak shortly after the start of the illness and then decreases. The detection of *Clostridium perfringens* antigens can be used for further clarification.

The test is suitable for the early detection of suspected infection with rotaviruses or in the case of clinical symptoms, as well as for the detection of *Clostridium perfringens* antigens in cattle, pigs and horses.

Product	Sample material	Test time	Pack size	Product code
tamaVet® Multi 4TA Test Rotavirus, Coronavirus, E. coli K99, Cryptosporidium parvum	Faeces	10 min	5 test cassettes	1172062N-05

The tamaVet<sup>®</sup> Multi 4TA (Rotavirus, Coronavirus, E. coli K99, Cryptosporidium parvum) Test is intended for the rapid detection of specific rotavirus and coronavirus antigens, as well as *Escherichia coli* (*E. coli*) K99 and *Cryptosporidium parvum* antigens in faecal samples taken from cattle.

Rotavirus belongs to the *Reoviridae* family and has numerous different serotypes. Coronavirus belongs to the *Coronaviridae* family, and the infection is usually transmitted orally. The bacteria *E. coli* belongs to the *Enterobacteriaceae* order and is found in the intestinal tract. The protozoan *Cryptosporidium parvum* belongs to the subclass *Apicomplexa* and forms infectious oocysts. The infection is normally transmitted orally. Enterotoxigenic *E. coli* (ETEC) have the ability to produce adhesins (such as K99), which can lead to the establishment and formation of enterotoxins in the intestine. Diarrhoeal diseases, especially in calves, are often caused by mixed infections with one of more of these pathogens. The largely similar symptoms they prompt, such as apathy, anorexia, diarrhoea, dehydration and fever can cause large losses in the herd as early as a few hours/days after birth.

The test is suitable for the early detection of suspected rotavirus and coronavirus, *E. coli* K99 and *Cryptosporidium parvum*, or in the case of clinical symptoms in cattle. As the excretion of pathogens differs and can be intermittent, the test should be repeated as necessary.

Bovine IgG				
Product	Sample material	Test time	Pack size	Product code
tamaVet <sup>®</sup> Bovine IgG Test	Whole blood, serum, plasma	10 min	5 test cassettes	1172065N-05

The tamaVet<sup>®</sup> Bovine IgG Test is intended for the semiquantitative detection of bovine immunoglobulin G (IgG) in the whole blood, serum or plasma of calves.

Newborn calves exhibit a low IgG serum concentration *post natum*, but are dependent on the absorption of maternal antibodies in their first 24 to 48 hours. As the time in which the intestinal epithelium can absorb these antibodies is limited ('gut closure'), an insufficient colostrum supply or failed absorption (failure of passive transfer/FPT) of IgG can pose a serious health risk to the herd.

The resulting hypogammaglobulinaemia can lead to an increased occurrence of diarrhoea and broncho-pneumonia and incur a high number of losses. In order to promptly diagnose hypogammaglobulinaemia, it is recommended to determine IgG levels in calves within a day of birth.

The test is suitable for the early detection of hypogammaglobulinaemia in the routine monitoring of newborn calves in herds. If necessary, it is recommended to repeat the test for monitoring purposes.



# Veterinary rapid tests Pigs



Rotavirus				
Product	Sample material	Test time	Pack size	Product code
tamaVet <sup>®</sup> Rotavirus Test	Faeces	10 min	5 test cassettes	1172050N-05

The tamaVet<sup>®</sup> Rotavirus Test is intended for the rapid detection of specific rotavirus antigens in faecal samples taken from cattle, pigs and horses.

Rotavirus belongs to the *Reoviridae* family and has numerous different serotypes. The infection is generally transmitted via the faecal-oral route. In addition to asymptomatic infections, rotaviruses are the main pathogens that cause severe gastrointestinal diseases, especially in young animals of various species. The virus infects the enterocytes in the microvilli and, after a short incubation period (12 hours to approximately 3 days), leads to drastic electrolyte shifts in the intestinal epithelium and to the death of cells with resulting malabsorption, caused in part by the enterotoxin NSP4. The consequences can include severe diarrhoea accompanied by extreme dehydration. Rotaviruses are amongst the most common pathogens that cause neonatal calf diarrhoea (NCD). The detection of antigens is usually possible with the onset on clinical symptoms, as excretion of the virus reaches a peak shortly after the start of the illness and then decreases.

The test is suitable for the early detection of suspected rotavirus or in the case of clinical symptoms in cattle, pigs and horses.

# **Multi 2TC · Rotavirus, Clostridium perfringens**

Product	Sample material	Test time	Pack size	Product code
tamaVet® Multi 2TC Test Rotavirus, Clostridium perfringens	Faeces	10 min	5 test cassettes	1172060N-05

The tamaVet<sup>®</sup> Multi 2TC (Rotavirus, Clostridium perfringens) Test is intended for the rapid detection of specific rotavirus and *Clostridium perfringens* antigens in faecal samples taken from cattle, pigs and horses.

Rotavirus belongs to the *Reoviridae* family and has numerous different serotypes. The infection is generally transmitted via the faecal-oral route. The bacteria *Clostridium perfringens* belongs to the *Clostridiales* order and is often found in the digestive tract of healthy animals or ingested orally. Disease caused by *Clostridium perfringens* is associated with increased proliferation in the intestine and the formation of various toxins. The absorption of these toxins into the blood can lead to enterotoxaemia. The animals exhibit severe and sometimes bloody diarrhoea and are even at risk of potential death resulting from shock. As symptoms resemble those of rotaviruses and mixed infections, this test combination is recommended. The detection of rotavirus antigens is usually possible with the onset of clinical symptoms, as excretion of the virus reaches a peak shortly after the start of the illness and then decreases. The detection of *Clostridium perfringens* antigens can be used for further clarification.

The test is suitable for the early detection of suspected infection with rotaviruses or in the case of clinical symptoms, as well as for the detection of *Clostridium perfringens* antigens in cattle, pigs and horses.



# Multi 3TA · Rotavirus, Clostridium perfringens, Cryptosporidium parvum

Product	Sample material	Test time	Pack size	Product code
tamaVet® Multi 3TA Test Rotavirus, Clostridium perfringens, Cryptosporidium parvum	Faeces	10 min	5 test cassettes	1172061N-05

The tamaVet<sup>®</sup> Multi 3TA (Rotavirus, Clostridium perfringens, Cryptosporidium parvum) Test is intended for the rapid detection of specific rotavirus, *Clostridium perfringens* and *Cryptosporidium parvum* antigens in faecal samples taken from pigs.

Rotavirus belongs to the *Reoviridae* family and has numerous different serotypes. The infection is generally transmitted via the faecal-oral route. The bacteria *Clostridium perfringens* belongs to the *Clostridiales* order and is often found in the digestive tract of healthy animals or is ingested orally. The protozoan *Cryptosporidium parvum* belongs to the phylum *Apicomplexa* and forms infectious oocysts. The infection is normally transmitted orally. Diarrhoeal diseases, especially in piglets, are often caused by mixed infections with one or more of these pathogens. The largely similar symptoms they cause, such as apathy, anorexia, diarrhoea, dehydration and fever can lead to large losses in the herd as early as a few hours/days after birth.

The test is suitable for the early detection of suspected infection with rotaviruses, *Clostridium perfringens* and *Cryptosporidium parvum*, or in the case of clinical symptoms in pigs. As the excretion of pathogens differs and can be intermittent, the test should be repeated where necessary.



# Veterinary rapid tests Horses





Rotavirus				
Product	Sample material	Test time	Pack size	Product code
tamaVet <sup>®</sup> Rotavirus Test	Faeces	10 min	5 test cassettes	1172050N-05

The tamaVet<sup>®</sup> Rotavirus Test is intended for the rapid detection of specific rotavirus antigens in faecal samples taken from cattle, pigs and horses.

Rotavirus belongs to the *Reoviridae* family and has numerous different serotypes. The infection is generally transmitted via the faecal-oral route. In addition to asymptomatic infections, rotaviruses are the main pathogens that cause severe gastrointestinal diseases, especially in young animals of various species. The virus infects the enterocytes in the microvilli and, after a short incubation period (12 hours to approximately 3 days), leads to drastic electrolyte shifts in the intestinal epithelium and to the death of cells with resulting malabsorption, caused in part by the enterotoxin NSP4. The consequences can include severe diarrhoea accompanied by extreme dehydration. Rotaviruses are amongst the most common pathogens that cause neonatal calf diarrhoea (NCD). The detection of antigens is usually possible with the onset on clinical symptoms, as excretion of the virus reaches a peak shortly after the start of the illness and then decreases.

The test is suitable for the early detection of suspected rotavirus or in the case of clinical symptoms in cattle, pigs and horses.

# **Multi 2TC · Rotavirus, Clostridium perfringens**

Product	Sample material	Test time	Pack size	Product code
tamaVet® Multi 2TC Test Rotavirus, Clostridium perfringens	Faeces	10 min	5 test cassettes	1172060N-05

The tamaVet<sup>®</sup> Multi 2TC (Rotavirus, Clostridium perfringens) Test is intended for the rapid detection of specific rotavirus and *Clostridium perfringens* antigens in faecal samples taken from cattle, pigs and horses.

Rotavirus belongs to the *Reoviridae* family and has numerous different serotypes. The infection is generally transmitted via the faecal-oral route. The bacteria *Clostridium perfringens* belongs to the *Clostridiales* order and is often found in the digestive tract of healthy animals or ingested orally. Disease caused by *Clostridium perfringens* is associated with increased proliferation in the intestine and the formation of various toxins. The absorption of these toxins into the blood can lead to enterotoxaemia. The animals exhibit severe and sometimes bloody diarrhoea and are even at risk of potential death resulting from shock. As symptoms resemble those of rotaviruses and mixed infections, this test combination is recommended. The detection of rotavirus antigens is usually possible with the onset of clinical symptoms, as excretion of the virus reaches a peak shortly after the start of the illness and then decreases. The detection of *Clostridium perfringens* antigens can be used for further clarification.

The test is suitable for the early detection of suspected infection with rotaviruses or in the case of clinical symptoms, as well as for the detection of *Clostridium perfringens* antigens in cattle, pigs and horses.

Tetanus				<b>f</b>
Product	Sample material	Test time	Pack size	Product code
tamaVet <sup>®</sup> Tetanus Test	Whole blood, serum	10 min	5 test cassettes	1172063N-05

The tamaVet<sup>®</sup> Tetanus Test is intended for the rapid detection of anti-*Clostridium tetani* antibodies in the whole blood or serum of horses, optimising vaccination management and aiding the diagnosis of infection.

The bacterium *Clostridium tetani* belongs to the *Clostridiales* order. It is abundant in soil, with infection primarily occurring through wounds. Muscle spasms (tetanus or 'lockjaw') triggered by *Clostridium tetani* develop through the proliferation of pathogens in the area of the wound and the formation of toxins. A major factor in the virulence of the infection is the tetanus

neurotoxin 'TeNT', which mainly takes a neurogenic route to the central nervous system. The resulting uncontrolled release of acetylcholine prompts clinical symptoms in horses, such as the prolapse of the nictitating membrane, trismus in the masticatory muscles, a 'saw horse' posture, motor disorders accompanied by muscle spasms and even convulsions.

The test is suitable for the monitoring of antibody titers and the optimisation of vaccination times in the context of vaccination management in foals and horses as well as for for the detection of infection with *Clostridium tetani*.

# Equine IgG

1 0				$\gamma \Lambda L$
Product	Sample material	Test time	Pack size	Product code
tamaVet <sup>®</sup> Equine IgG Test	Whole blood, serum	10 min	5 test cassettes	1172064N-05

The tamaVet<sup>®</sup> Equine IgG Test is intended for the semiquantitative detection of equine immunoglobulin G (IgG) in the whole blood or serum of foals.

It is not possible for horses to transfer immunoglobulin to their foals through the placenta, meaning newborns are primarily dependent on the absorption of maternal antibodies in the first few hours and weeks following birth. The failed absorption of colostrum (failure of passive transfer/FPT) or insufficient absorption of IgG poses a serious health risk from resulting hypogammaglobulinaemia. Ensuing immunosuppression can lead to a number of severe secondary infections and even sepsis. Clinical symptoms can include diarrhoea, arthritides, pneumonia, apathy and dehydration. Hypogammaglobulinaemia is one of the most common forms of immunodeficiency in foals and affects approximately 3-30% of the population. For a prompt diagnosis, it is recommended to determine IgG levels in foals approximately 18 to 24 hours *post natum*.

The test is suitable for the early detection of hypogammaglobulinaemia in the routine monitoring of newborn foals. If necessary, it is recommended to repeat the test as a means of monitoring treatment.



# Veterinary rapid tests Urine analysis strips

Reactif

NO II

s Stops

- Clear results within 1-2 minutes
- Suitable for use by animal owners
- Up to 14 different parameters available
- Different pack sizes for every need

Product	Pai	rame	ter												Tests/ tube	Product code	Reader compatible	
Reactif G						G									100	41010-L		
Reactif GP						G						Р			100	41020-L	V	
Reactif 2					с				Ma						50	41021-M	~	
Reactif 2B						G	К								100	41022-L		
Reactif 3						G					рН	Р			100	41030-L	~	
Reactif 3A						G	К				рН				100	41031-L	~	
Reactif 4			BI			G					рН	Р			100	41040-L		
Reactif 4A						G					рН	Р	S		100	41041-L	V	
Reactif 4B						G		L		N		Р			100	41042-L	V	
Reactif 5B			BI			G	к				рН	Р			100	41050-L		
Reactif 7			BI			G	К	L		N	рН	Р			100	41070-L	V	
Reactif 8		Bi	BI			G	К			N	рН	Р		υ	100	41081-L		
Reactif 8SG			BI			G	К	L		N	рН	Р	S		100	41080-L	~	
Reactif 9		Bi	BI			G	К			N	рН	Р	s	υ	100	41090-L	~	
Reactif 10SL		Bi	BI			G	К	L		N	рН	Р	S	υ	100	41101-L	<ul> <li></li> </ul>	
			ы			~	V						6		100	41110-L		
Reactif 11M	A	BI	ы			G	K	L		N	рн	P	5	U	25	41110-S	V	
Reactif 13	Α	Bi	BI		с	G	К	L	Ma	N	рН	Р	S	U	25	41130-S	V	
Reactif 14	Α	Bi	BI	Ca	С	G	К	L	Ma	N	рН	Р	S	U	50	41140-M	<ul> <li>✓</li> </ul>	
Reactif Level 1 & 2 control kit (positive and negative control; 5 ml each)		Bi	BI		с	G	к	L	Ma	N	рН	Р	s	U	Kit	41008		

# **Product list: Reactif Urinalysis strips**

 $A = Ascorbic acid \cdot Bi = Bilirubin \cdot Bl = Blood \cdot Ca = Calcium \cdot C = Creatinine \cdot G = Glucose \cdot K = Ketones \cdot L = Leukocytes \cdot Ma = Microalbumin, N = Nitrite \cdot pH = pH level \cdot P = Protein \cdot S = Specific gravity \cdot U = Urobilinogen$ 

The use of test strips – like those used in human medicine – for the qualitative or semi-quantitative examination of animal urine (which can be evaluated differently depending on the animal in question) has also proven its worth in veterinary medicine. The composition of urine varies greatly between different species and so is assessed on the basis of reference values. It can provide valuable information regarding diseases of the urinary tract, as well as other organs and systems.



# Veterinary medicine

# Point-of-care devices

- Lab quality results in a matter of minutes
- No waiting times for external laboratory evaluation
- Gentle and stress-free experience for the patient
- Save time, money, personnel and resources



# Reactif Touch Urine Analysis Devices

# The ideal device for every need

The Reactif Touch urine analysis devices are semiautomatic, semi-quantitative reflection photometers, which analyse and interpret the colour intensity in the reaction fields of urine test strips. The clear display is easy to get to grips with in just a short space of time. The device stores the results automatically and produces a report for tests which have been carried out. The data can then be saved easily onto a computer.

# **Advantages**

- Analysis of test strips with up to 14 different parameters
- Large, clear touch display
- Test modes: routine, STAT and QC
- Automatic calibration
- Easy to clean
- Operational in multiple languages
- Storage: 2000 results (automatic)
- Internal printer for up to 3 copies per test (optional: label printing for quick and easy result evaluation management)
- Simple data transfer and connection to LIS or external computer
- Barcode reader (optional)



Product	Product code
Reactif Touch Urine Analysis Device	41300
Reactif Touch Urine Analysis Device incl. barcode scanner	41301
Reactif Touch Barcode Scanner	41305
Reactif Touch Data Transfer Protocol incl. data transfer cable RS 232C with Y-switch	41306



# Waste? It doesn't have to be this way...



# Help us to avoid waste & protect the environment ...with our short shelf life tests!

At nal von minden, stock is planned in such away that we can offer our customers outstanding choice and availability without also accumulating unused and expired stock. Nevertheless, it is sometimes the case that we find ourselves with leftover products.

The solution: As our tests near their expiry date, they are categorised as short shelf life (SSL) products and offered to our customers at a reduced price. Depending on the test, SSL products can have up to 6 months before their expiry date. **How can you benefit from this?** Register your interest in SSL tests and you will receive notification as soon as tests that meet your criteria become available as SSL products.

□ I am especially interested in the following tests: .....

Practice name:	•••	• • •	•••	••	•••	••	•••	• •	• •	•	••	•••	•••	•	••	• •	•	••	• •	•	• •	•	•••	•	••	•	••	•	••	•	
Customer number:	•••	•••	••	• • •	•••	•	•••	••	••	• •	• •	•	• •	• •	•	•••	•••	•	•••	•	•••	•	•••	• •	•	• •	•••	• •	•••	• •	• • •
Address:	•••	•••	• • •		•••	• •	• • •	• •	••	• •	•••	• •	•	•••	•••	•	•••	•••	۰	•••	•	•••	• •	•	•••	•	• •	•	• •	•	•••
Contact person:			•••	••	•••	••	•••	•••	•••	• •	•••	•••	•••	• •	•••	•••	• •	• •	•••	•	•••	•	•••	•	•••	• •	•••	•	•••	• •	
Email:	•••	•••	•••	• • •	•••	•••	• •	•	•••	•••	••	• •	•	• •	•••	•	•••	•••	•	•••	•	•••	• •	•	•••	•	• •	•	•••	•	• ••
Telephone:		• • •	•••	••	••	••	••	••	•••	• •		•••	•••	• •	••	•••	• •	•	• •	•	•••	•	•••	•	•••	•	•••	•		•	

Please inform me by: 
□ Email 
□ Fax 
□ Telephone

You can also enquire about the availability of SSL products when you place an order. For automatic notification about SSL products, please fill out the form and send it back to nal von minden by fax or email.

Email: tamavet@nal-vonminden.com · Fax: 0800 589 20 23







# Germany

Carl-Zeiss-Strasse 12, 47445 Moers





# **Moers (Headquarters)**

Tel.:....+49 2841 99 820-0 Fax: .....+49 2841 99 820-1

. . . . . . . . . . . . . . . . . .

# Belgique / België

# Français:

Numéro gratuit:.....0800 718 82 Fax gratuit: .....0800 747 07 dept.ventes@nal-vonminden.com www.nal-vonminden.fr

# Nederlands:

Fax: .....+31 70 3030 775 verkoop.dept@nal-vonminden.nl www.nal-vonminden.nl

# Česká republika

Bezplatný fax: ..... 800 143 686 czech@nal-vonminden.com www.nal-vonminden.cz

#### Danmark

Gratis nummer: ......80888753 Fax: .....+31 7030 30775 distribution@nal-vonminden.dk www.nal-vonminden.dk

# Deutschland

Gratis-Fax: .....0800 589 2023 vertrieb@nal-vonminden.de www.nal-vonminden.de

#### España

Tel. gratuito: ......900 938 315 Tel. directo: ......+49 941 290 10-759 ventas@nal-vonminden.es www.nal-vonminden.es

#### **Regensburg (Headquarters)**

Friedenstrasse 32, 93053 Regensburg Tel.:....+49 941 290 10-0 Fax: .....+49 941 290 10-50

. . . . . . . . . . . . . . . . .

#### France

Numéro vert: .....0800 915 240 Fax gratuit: .....0800 909 493 N° international: ..+49 941 290 10-739 Fax international: ...+49 941 290 10-50 dept.ventes@nal-vonminden.fr www.nal-vonminden.fr

## Ireland

www.nal-vonmind	en.com
sales-dept@nal-vor	nminden.com
Freefax:	
Freephone:	

# Italia

vendite.dipt@nal-vonminden.com www.nal-vonminden.it

# Latinoamérica

Tel. directo:.....+49 941 290 10-761 ventas.latam@nvm-diagnostics.com www.nal-vonminden.es

# Luxembourg

dept.ventes@nal-vonminden.com www.nal-vonminden.fr

# Nederland

verkoop.dept@nal-vonminden.nl www.nal-vonminden.nl

# Norge

Free phone: ......800 16 731 norway@nal-vonminden.com www.nal-vonminden.com/no

# Österreich

www.nal-vonminden.de
vertrieb.abt@nal-vonminden.de
Gratis Fax:0800 298 197
Gratis Tel:0800 291 565

# Göttingen

Robert-Bosch-	Breite 23, 37079 Göttingen
Tel.:	+49 551 270706-0
Fax:	+49 551 270706-50

## Polska

www.nal-vonminden.pl		
sprzedaz.dept@nal-vonminde	en.pl	
Bezpłatny fax:00800	4911594	
Bezpłatny tel.:00800	4911595	

#### Portugal

www.nal-vonminden.pt
vendas@nal-vonminden.pt
Tel. direto:+49 941 290 10-735
Tel. gratuito:

#### Schweiz / Suisse / Svizzera

# Deutsch:

Gratis-Tel.:	0800 832 164
Gratis-Fax:	0800 837 476
info@nal-vonminde	n.de
www.nal-vonminde	en.de
Français:	
Numéro gratuit:	0800 564 720
Fax gratuit:	0800 837 476
dept.ventes@nal-vo	nminden.com
www.nal-vonminde	en.fr
Italiano:	
Numero verde:	0800 832 2146
Fax gratuito:	0800 837 476

www.nal-vonminden.it		
vendite.dipt@nal-vo	nminden.com	
Fax gratuito:	0800 837 476	
Numero verde:	0800 832 2146	

# Suomi

imainen Fax:	0800 918262
myynti@nai-vonminde	en.com
www.nal-vonminden.o	<b>com/fi</b>

# Sverige

sweden@nal-vonminden.com www.nal-vonminden.se

#### **United Kingdom**

Freephone: .....0808 234 1237 Direct dial: ..... +44 1580 23 22 88 sales-dept@nal-vonminden.co.uk www.nal-vonminden.com

info@nal-vonminden.com www.nal-vonminden.com