QUALITÄTSMANAGEMENT milch

# NATIONAL STANDARD FOR MILK PRODUCTION

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QUALITÄTSMANAGEMENT MILCH IS AN INITIATIVE OF

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DBV Deutscher Bauernverband

MIV MILCH INDUSTRIE VERBAND

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# National quality management scheme for milk

Standard-setting body: **QM-Milch e.V.**
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# 1. General introduction

## 1.1. The basics

Food production lays down the highest demands on the quality and safety of the product and production process. Current quality assurance schemes are constantly refined and are perpetually improving the extremely positive image that consumers have of milk and dairy products.

Quality assurance in milk production and processing is based on a myriad of legal provisions and controls (milk quality regulation, national food and feed law, EU hygiene rules for food of animal origin, etc.), which are complemented by voluntary quality programmes introduced by the commercial partners involved. The quality assurance and management systems that have been built up over recent years are based on the principle of self-responsibility and self-monitoring.

With the milk markets becoming more international and globalised, and, in particular, farmers having to respect additional requirements, for instance under EU food hygiene law, there are many challenges ahead for the dairy industry. For that reason, Germany's current quality assurance measures for milk production and processing were set at national level.

The quality assurance system that applies to the milk production sector has been in place for decades and is constantly refined. This system will now become more transparent for the entire chain, thus increasing its acceptance at all levels of production and processing. The purpose of this is to ensure high levels of quality as competition grows, and to broadcast an enhanced image of the sector to consumers, politicians and traders.

## 1.2. The QM Milk standard

The German Farmers' Association (DBV), German Raiffeisen Association (DRV) and German Dairy Industry Federation (MIV) took the initiative to establish a working group, which in 2002 laid the foundations of a national quality management scheme (QM Milk). The QM Milk scheme, founded by the three aforementioned associations and supported by the entire dairy industry, is a process assurance system for milk production. This quality management scheme for milk was then developed into the current standard. The public was involved in the drafting process via regional associations, in line with § 14 of the law on milk and fats. The QM Milk Standard is a business-to-business standard between milk producers

and dairies. There are no plans to include a health claim on milk products. The registered association QM Milk is the standard-setting body. The statutes of this association rule out conflicts of interest between the standard-setting body and certification authorities.

## 1.3. The QM Milk advisory board

The QM Milk advisory board lays down the requirements and criteria of the QM Milk standard. The QM Milk advisory board is composed of associations and organisations that represent the milk value chain.

In accordance with § 15 of the statutes of QM Milk, the members of the QM Milk advisory board are appointed by:

- The German Farmers' Association, DBV (farming, milk producers)
- The German Dairy Industry Federation (dairy industry)
- The German Raiffeisen Confederation (dairy industry)

Other specialists, such as representatives of the business community concerned, can be invited to the meetings. These specialists may only attend in a purely advisory function.

# 2. Setting targets

In addition to product quality assurance, process quality assurance is becoming increasingly important. The entire milk production process should go beyond merely respecting parameters that are directly identifiable in the end product, and strive to meet the requirements of processors and consumers alike. The aim of the QM Milk standard is to monitor the production process, i.e. assuring the quality of the raw milk at farm level.

The QM Milk standard sets stringent and verifiable provisions for milk production. In addition to respecting legal provisions and good farming practices, the QM Milk standard stipulates further requirements for milk production in order to both guarantee transparency and traceability of the system and to take into account societal demands related to milk production. Monitoring these process parameters creates greater product safety and will do justice to the high standing of milk and dairy products.

# 3. Scope

The QM Milk standard is comprised of various components, namely the German national standard for milk production, QM Milk's list of criteria and the QM Milk handbook for milk producers. All of these elements combine to form the basis for certification on which the QM Milk standard is built. The QM Milk standard 2020 is effective as of 1st January 2020 and will replace the QM Milk standard 2.0 from 1st January 2020.

The QM Milk standard covers all basic requirements that must be met throughout the process of producing cow's milk in Germany. It applies to all milk producers who participate in the QM Milk certification programme, both voluntarily and pursuant to the terms and conditions for milk deliveries set by dairies. Under the certification process, suitable arrangements are made to place the certification body in a position to provide all relevant certification services (in line with DIN EN ISO/IEC 17065).

QM Milk's list of criteria sets the conditions to be met for the QM Milk certification programme, which stem from legal provisions, good farming practices, and further requirements for milk production. These further requirements are clearly explained in the QM Milk handbook for milk producers.

The QM Milk standard is a dynamic system that is constantly being further refined to include new findings and requirements. The system will be updated every three years. Should any legal provisions affecting the criteria of the QM Milk standard change, the system will be amended accordingly.
The standard documents are publicly available and can be consulted at www.qm-milch.de.

# 4. General requirements

Monitoring the production process includes checking the following:

- Health and well-being of the animals
- Identification and origin of the animals
- Milk production and storage
- Feed
- Respecting legal provisions on the use of medicines
- Environmental protection.

## 4.1. Animal health and well-being

Producing milk as a foodstuff must respect certain hygiene and housing conditions. Additionally, there are strict provisions relating to the health of the cattle. Inter alia, cows that produce milk as a foodstuff must exhibit no recognisable signs of general health problems.

Routine monthly herd inspections are carried out to check udder health. Should there be a suspicion that an animal has an udder infection, an individual examination is necessary to determine how to treat the animal, or to ascertain whether it suffers from a chronic infection, or is resistant to treatment.

## 4.2. Animal identification and the farm register

Statutory provisions stipulate that milk producers are obliged to place two ear tags on each cow. Should one ear tag be lost, the milk producer must immediately apply to the competent authorities for a replacement tag and identify the animal once again.

According to the order on the movement of livestock (Viehverkehrsverordnung - VVVO), each livestock producer is obliged to keep a farm register. Any changes to the herd must be recorded in the official database on identification and origin (HI-Tier-Datenbank).

## 4.3. Milk production and storage

The environment in which the cattle are milked must be conducive to high-quality milk production. The milking parlour must have sufficient lighting and ventilation. The milking equipment, clusters and cooling tanks must be serviced regularly. There are specific hygiene requirements for milking that must be respected by the milking staff.

The milk must be cooled and stored in a way that guarantees that it will not be adversely affected, e.g.by unauthorised third parties, vermin, etc.

## 4.4. Feed

The use of feedingstuffs is a central component in the production of high-quality food. There are therefore special requirements on the purchase and use of feed.

Milk producers may only use bought-in feed (compound and straight feed) from manufacturers and traders who respect an agreement that is based on the national standard feed framework agreement. To consult and download the feed framework agreement, see www.qm-milch.de. What's more, only feed that is included in the positive list of feed materials may be used.

Feed is tested for any undesirable substances in the framework of monitoring programmes carried out by official bodies and other institutions.

Every delivery of feed is to be documented by the milk producer with delivery certificates, itemised invoices, or other elements of proof. This also applies to buying in feed produced on agricultural holdings.

By storing feed for different species separately, it is possible to effectively prevent any mixing of feedingstuffs.

It is recommended to take nutrient analyses when calculating feed rations in order to feed in a manner that respects both the livestock and the environment.
Should there be a well-founded suspicion that a feed lot has been polluted, residue controls are also to be carried out on the holdings own feed.

## 4.5. Veterinary medicinal products (VMPs)

Milk producers must clearly identify all cattle that have been treated. Milk from cattle that have been treated with VMPs may only be placed on the market again once the withdrawal period has passed. Any delivered milk must be free from inhibitors. The milk is regularly checked for inhibitors (several times a month), pursuant to regulation on milk quality, the QM Milk basic monitoring (see 5 detecting residues), and, if necessary, regulation on milk deliveries.

All milk producers carry out their own on-farm checks to attend to their herds with the help of a veterinarian. The aim is to maintain the herd's state of health. It is recommended to sign a contract of care with the veterinarian.

Milk producers must, at any time, be able to provide proof of purchase of prescription-only VMPs that are only available from a pharmacy. Adequate care should be taken to ensure

that said proof of purchase is duly completed. This evidence should be filed in chronological order and kept for five years.

Milk producers must record every instance of VMPs being used on their livestock. When milk producers administer VMPs themselves, they must fully respect the instructions of the veterinarian who supplied the aforementioned proof of purchase. It is especially important to adhere to the withdrawal periods set by the veterinarian.

In principle, serums, vaccines and antigens may only be administered by veterinarians. At the request of the veterinarian, the competent authorities may allow for exceptions on a case-by-case basis (§ 44 of the regulation on veterinary vaccines).

All medication received from the veterinarian/pharmacy must be stored in respect of the instructions outlined in the accompanying information. Once the expiry date has passed, the medication must be properly disposed of. All instruments used must be clean and appropriate for the task at hand.

## 4.6. The environment

The fertiliser ordinance obliges each holding to carry out a nutrient comparison, which records each farms' nutrient levels. It is mandatory to provide evidence of said comparison.

The guide to good farming practices regulates spreading farmyard manure.

# 5. Detecting residues

In order to prevent undesirable substances entering the milk, both the dairies and official bodies conduct a slew of analyses in accordance with the provisions in force.

Dairies have a duty to exercise due care and therefore carry out regular chemical analyses of the milk or dairy products. General checks and individual examinations test for substances (residues and contaminants), which are harmful or could lead to undesirable changes to the organoleptic properties of the milk or dairy product. The standard-setting body has published the currently valid version of the requirements for basic monitoring, which the holdings pending certification must respect, on www.qm-milch.de.
The residue analyses take place at milk tanker level using specific mixed samples from multiple producers, the dairy’s raw milk tank or individual producer samples.

Additionally, checks can be carried out by official bodies or, in the case of anomalies, be commissioned by regional dairy associations or state inspection associations to test feed for any undesirable substances. What's more, the feed industry tests for residues as part of its HACCP approach.

# 6. Control system

## 6.1. Requirements of certification bodies

The objective monitoring and certification of dairy farms that take part in the QM Milk certification scheme, is carried out by independent certification bodies. These bodies carry out inspections in the dairy farms – referred to as audits or auditing, controls or checks in the QM Milk standard. The certification bodies determine whether the dairy farms comply with the requirements as defined in the QM Milk standard, evaluate the results and make a decision on certification.

Certification bodies are those which are accredited according to DIN EN ISO/IEC 17065/QM Milk Scope.

The certification bodies are authorised by the QM Milk standard-setting body to certify QM Milk. Before the certification bodies start the QM Milk auditing and certification, they must go through the authorisation process and sign the contract with the standard-setting body. The process for the authorisation of certification bodies can be consulted and accessed at www.qm-milch.de.

The certification bodies ensure that the execution and results of the audits are documented in full and in detail. The certification bodies commit to sending in information requested by QM Milk on time and to guaranteeing the latter insight into the documents related to the QM Milk auditing and certification activities. The certification bodies are required to send the QM Milk standard-setting body an evaluation of the audits that have been carried out. To do this, the nationwide data interface in the QM Milk system should be used and the relevant regulations adhered to. These evaluations form the basis of an assessment on how the standard has been implemented.

Certification bodies have qualified auditors who meet the requirements listed under section 6.2. The certification bodies ensure that the auditors have successfully demonstrated the

specialist knowledge needed for QM Milk controls and that they have taken part in regular QM Milk training sessions and further training measures (section 6.3). Staff who carry out the evaluations and staff who make decisions on granting certifications must have qualifications that at least correspond to the requirements listed under section 6.2. In addition, the requirements described under section 7 apply.

In the event that regulations set in the QM Milk standard are violated and that there is a lack of cooperation with the QM Milk standard-setting body, the latter reserves the right to impose sanctions on the certification body and, where appropriate, to revoke the authorisation.

## 6.2. Requirements of the auditors

Independent auditors from the certification bodies check whether QM Milk participants comply with the QM Milk criteria.

QM Milk auditors must have proven specialist knowledge as referred to in DIN EN ISO/IEC 17065/QM Milk Scope, which is relevant to the work an auditor must perform for the QM Milk certification scheme. Relevant auditor training is needed for this. Trainee auditors must carry out at least three audits under the supervision of a registered auditor before carrying out an audit themselves. Registered auditors must perform at least ten audits per year in the QM Milk certification scheme or equivalent audits in the cattle sector, e.g. in cattle fattening or in organic cattle and dairy farming. When the auditors carry out less than ten audits per year in the aforementioned sectors, they must successfully complete an audit under the supervision of a registered auditor the following year.

Auditors must fulfil one of the following technical requirements:

- Have a vocational qualification as a farmer and/or livestock producer with a specialty in cattle husbandry or
- Have graduated from an agricultural technical college (e.g. certified manager/technician/agricultural economist/agricultural manager) or
- Have graduated from a mastership examination in farming/livestock production with a specialty in cattle husbandry or
- Have graduated from an agricultural programme in agricultural engineering/Bachelor or Master's degree or
- Have graduated from dairy sector vocational training or
- Have at least three years' professional experience as a milk inspector.

In justified individual cases, the certification body can recognise another professional qualification and experiences in consultation with the standard-setting body.

## 6.3. Further education and training

The auditors must receive training in the QM Milk standard before they begin working in the system. Thereafter, they are obliged to take part in regular training sessions on the QM Milk standard, at least once per year. The training sessions are either provided and run by QM Milk, or by the competent certification authorities themselves. However, the latter must ensure that representatives from the certification body have taken part in the training sessions offered by QM Milk at least once per year.

## 6.4. Duty for the holding pending certification to cooperate

The holding pending certification must continually provide the certification body with a monthly assessment on the quality of the milk, which, according to the provisions of this standard, may lead to special controls. Additionally, the certification body should be informed immediately of any suspensions of milk deliveries. Milk deliveries may be suspended as a result of the bacterial count (100,000 per ml) or cell count (400,000 per ml) being exceeded, or because of inhibitors or other problems detected by dairy programmes that monitor harmful substances and residues. Such programmes include basic monitoring under section 5 of the standard, or tests carried out by official bodies in accordance with the regulation on contamination. The certification body must always be in a position to ascertain whether special controls, such as those under section 6.6 of the standard, need to be carried out.

When applying for the first certificate, the milk producer must provide the following pieces of information to the certification body, or authorise the certification body to access them: milk quality data from the past six months, the quantities delivered each day, and the number of separate stables, milking parlours and milking rooms, should this number exceed one.

## 6.5. Inspection system

The QM Milk list of criteria includes QM Milk criteria that are used to evaluate the holdings. With the help of the QM checklist on self-evaluation/inspection protocol, the QM Milk audi-

tors check whether the QM Milk criteria are being complied with. These correspond to the QM Milk list of criteria, which can be found in the annex to the QM Milk standard.

A 2-point system is used to assess whether the individual requirements are being complied with, whereby 0 points means that the criterion was not met and 1 point is awarded when the criterion was met. In addition, for some requirements a bonus point may be awarded if the criterion has already been met and a point granted. Criteria that have a particularly significant influence on food safety and traceability are defined as mandatory criteria (M.C.), which absolutely must be complied with. In addition, selected criteria (focus criteria) of the focus areas animal welfare, milk hygiene and farm environment have a higher value.

There are 69 criteria in the QM Milk list of criteria. 17 of these are M.C. The maximum number of points that can be obtained is 81. The minimum number of points required to pass the audit is 61. There are plans to improve the process. Aside from continually adapting the standards, this is also being done by specifying a set minimum number of points for the focus areas animal welfare, milk hygiene and farm environment. The audit cycle is based on the number of points achieved in the focus criteria according to the regulations laid down in 6.6.

## 6.6. Interval between inspections: system and special audits

The certification body regularly carries out a system control on milk producers every three years. The number of points achieved in the audit - without factoring in bonus points - in the three focus areas animal welfare, milk hygiene and farm environment determine the timing of the following audit:

Table 6.6: Time of the subsequent audit according to the results of the focus area examination

| **Number of points in focus areas** | **Subsequent audit** |
|---|---|
| Animal welfare: 11 - 13<br>Milk hygiene: 12 - 14<br>Farm environment: 8 - 10 | In three years |
| Animal welfare: <11<br>Milk hygiene: <12 | After 18 months |

Farm environment: <8

The maximum registration period for an audit on the part of the certification body for the milk producers is three weeks. As part of on-site auditing, the quality of the milk production process is checked. The quality of the product is used to check permanent compliance with the quality production process. Thus, the milk deliveries of every milk producer are checked in laboratories, which are accredited according to DIN EN ISO/IEC 17025 and authorised by the competent regional authorities (Landesstelle).

The minimum number of analyses per milk producer and per month for each analysis criterion is as follows:

Table 6.7: Minimum number of analyses

| Analysis criterion | Minimum no. of analyses | Milk quality reg. specification |
|---|---|---|
| Milk fat | 4 times | 3 times |
| Milk protein | 4 times | 3 times |
| Milk urea | 4 times | No requirement |
| Cell count (indicator of udder health) | 2 times | 2 times |
| Bacterial count (indicator of bacteriological condition) | 2 times | 2 times |
| Freezing point (indicator of purity and naturalness) | 1 time | 1 time |
| Inhibitors (indicator of the absence of veterinary medicines) | 2 times | 2 times |

Thanks to intensive quality control of the product itself, i.e. the milk (see also section 5 on detecting residues), inspections every three years are sufficient for all milk producers whose deliveries have not been suspended and who achieve the intended result of the minimum number of points in the focus areas (see Table 6.6) in line with the intended improvement process. This is because the raw milk analyses provide a constant source of information on the health and well-being of the animals, milk production and storage, feeding, and the correct administration of veterinary medicines.

## Special controls

During the validity period of the certificate, the certification body assesses the information made available to it under section 6.4 on a monthly basis, and decides whether special controls need to be organised in line with the following criteria:

- If the milk delivery is suspended because of a bacterial count that exceeds 100,000 per ml, or if the cell count is above 400,000 per ml, in line with the provisions of annex IX part II no. 2 line 2 to Regulation (EC) No 854/2004, the quality of the milk producers' process is checked outside of the regular audits, which take place once every three years. This is done by carrying out a special control on section 1 "health and well-being of the animal/measures to ensure udder health", and section 3 "milk production and storage" of the QM Milk list of criteria. This should take place soon after the milk delivery has been reauthorised. During this control, a total of at least 37 points must be achieved, without including the bonus points. Otherwise, this special control is to be repeated within the space of 12 months. If an M.C. is not met, the rate of controls set out in table 6.8 applies.

- If the milk delivery is suspended because of inhibitors, as stipulated by the Food and Feed Code, the quality of the production process is reviewed outside of the three-year inspection cycle. This is done through a non-routine special control, which reviews sections 5.1 to 5.5 of the QM Milk list of criteria. This should take place soon after the milk delivery has been reauthorised. If any section between 5.1 and 5.5 of the QM Milk list of criteria is not complied with during the non-routine special control, the minimum number of points required is considered as not reached, and the rate of checks set out in table 6.8 applies.

- If the milk delivery is suspended after maximum values were exceeded during harmful substances and residue analyses, the quality of the production process is reviewed outside of the inspection cycle. This takes the form of a non-routine special control, which reviews sections 3.2.2., 4.1. to 4.3., 4.6. and 5.6 of the QM Milk list of criteria. This should take place soon after the milk delivery has been reauthorised. If any section between 3.2.2., 4.1. to 4.3., 4.6. or 5.6 of the QM Milk list of criteria is not complied with during the non-routine special control, the minimum number of points required is considered as not reached, and the rate of checks set out in table 6.8 applies.

If the certification body receives a complaint from a third party, such as QM Milk, about a certified holding, the certification body checks whether there are compelling grounds to carry out a special audit. In this case, an immediate flow of information to QM Milk must be

guaranteed. The certification body can at any given time arrange an unannounced special audit related to an individual case. The certification body is also bound, upon the initiative of QM Milk, to immediately carry out a special audit. Once the results of the special audit are evaluated, the certification body makes a decision on the possible withdrawal of the certificate.
The certification body will immediately notify the QM Milk standard-setting body of any events and crisis situations. The certification body supports QM Milk when dealing with and clearing up events and crisis situations.

## 6.7. Interpreting the findings of the audit

If the milk producer achieves the minimum number of points required and, at the same time, meets all M.C., the QM Milk audit is considered as passed.

If during the QM Milk audit the minimum number of points required is not achieved, or if an M.C. is not met, the audit is initially considered as not passed. The milk producer is asked to remedy the shortcomings that have been identified. A follow-up control will take place within the space of a month when the minimum number of points is not achieved or when a M.C. is not met:
Scenario a) When a follow-up control is carried out due to a M.C. not having been fulfilled, all criteria, including the M.C. that was not passed, are tested on the farm, provided that the criterion is not a farm documentation criterion 2.1, 4.2, 5.1. If the farm fails to pass a M.C. criterion during the follow-up control or does not achieve the minimum number of points required, in the case of a follow-up control, due to a M.C criterion not being achieved during the regular audit, the QM Milk follow-up control is also not passed.
Scenario b) If the milk producer does not reach the minimum number of points in the follow-up control due to the minimum number of points once again not being achieved during the regular audit, a second follow-up control takes place one month later that must be successfully completed in order to pass the QM Milk audit.
The procedure is laid down in Table 6.8 below.

If an M.C. criterion is not fulfilled or the minimum number of points is not achieved during the special audit as laid down in 6.6, the rate of controls set out in Table 6.8 applies.
Any potential follow-up controls to the audits do not alter the regular cycle of audits.
The procedure to follow when a special control is not passed is described under section 6.6.

In the event of clear and serious infringements of legislation such as Reg. 852/2004/EC, Reg. 853/2004/EC, the Animal Welfare Act, the Act on the Protection of Animals and the

Keeping of Production Animals inter alia, the auditors must end the audit and class it as failed. In these cases, the auditors must document the shortcomings that led to the termination of the audit in writing. Insofar as it is not possible for the auditors to provide a definitive judgement on the spot on whether there has been a legal infringement or not, the auditors are required to immediately inform the decision-making staff at the certification body.

Table: 6.8: Procedure in the event of non-compliance with a M.C. criterion or with the minimum number of points during the audit

| | |
|---|---|
| **M.C. criterion not met during the regular audit** | Follow-up control within one month |
| M.C. criteria or minimum number of points not achieved during the follow-up control | QM Milk not passed/withdrawal of certificate |
| **Minimum number of points not achieved during the regular audit** | Follow-up control within one month |
| Minimum number of points not achieved during the follow-up control | 2nd follow-up control within another month |
| Minimum number of points at 2 Follow-up control not achieved | QM Milk not passed/withdrawal of certificate |

Following the audit, the auditor writes a report. The milk producer must countersign this.

# 7. Issuing of certificates

After passing the QM Milk audit, the certification body issues a certificate to the milk producer.

The certificates are valid for a period of 18 months or three years following the date of the audit. The basis for this is the outcome of the audit including the evaluation (minimum number of points achieved) in the focus areas. In the event of milk deliveries being suspended, which triggers the special controls described in section 6.6 during the certificate validity period, the certification body has to withdraw the certificate. For the certificate to be issued again, the special controls laid down in section 6.6 must be passed. If the special controls are passed, the farm's individual audit cycle is not lengthened.

The regular subsequent audit should be carried out within a time period that allows the renewed certificate to be issued promptly. The subsequent audit can take place three months before the end of the certificate's validity period, or three months after the end of the certificate's validity (grace period). However, certification must be completed by the end of this grace period. If the milk producer makes a justified request, a later audit can be authorised

by the certification body due to particular farm-related conditions, e.g. an emergency situation, disease. However, the subsequent validity period is calculated from the end of the previous certificate's expiration date.

In the event that the QM Milk subsequent audit or the required follow-up controls are not passed, the certification body has to withdraw the certificate (see Table 6.8)

As set out in section 6.6, in the event of special audits related to an individual case following serious infringement or during detected serious, legal infringements, the certification body can immediately decide to withdraw the certificate, deviating from the regular certificate validity period.

**Annexes:** I QM Milk's list of criteria

II The QM Milk handbook for milk producers

# Annex I: QM Milk's list of criteria

**01.01.2020**

| | | | | | |
|---|---|---|---|---|---|
| | **Points: 0 = not met; 1 = met; 2 = bonus point** | | | | |
| | | | **Focus areas/number of points** | | |
| | | | **Animal welfare** | **Milk hygiene** | **Farm environment** |
| **1.** | **Animal health and well-being** | | | | |
| **1.1.** | **The herd is recognised as being officially free from tuberculosis, brucellosis and leucosis.** | | | | |
| **M.C.** | 0 | No, officially off limits for milk collections | | | |
| | 1 6,8 | No positive results during regular official controls, or able to deliver | | | |
| **1.2** | **Cows that produce milk as a foodstuff exhibit no signs of infectious diseases, which can be transferred to humans via the milk.** | | | | |
| **M.C.** | 0 | Not met | | | |
| | 1 | Met/no clinical signs of diseases such as salmonellosis, listeriosis, campylobacter | | | |
| | 2 | A contract of care has been signed with a veterinarian | | | |
| **1.3** | **Cows that produce milk as a foodstuff exhibit no recognisable signs of general health problems and do not suffer from diseases of the genital organs with discharge; stomach or bowel diseases with diarrhoea and pyrexia; or a recognisable inflammation of the udder or teat skin.** | | | | |
| **M.C.** | 0 | Not met | | | |
| | 1 | Met | | | |
| **1.4** | **Sick animals are separated from the herd.** | | | | |
| | 0 | Not met | | | |
| | 1 | Met | | | |
| **1.5** | **Cows that produce milk as a foodstuff have no udder wounds that could contaminate the milk.** | | | | |
| **M.C.** | 0 | Not met | | | |
| | 1 | Met/cows with udder wounds are milked separately and the milk is not delivered | | | |
| **1.6** | **Hoof care is provided when necessary and at least once per year** | | **1** | **0** | **0** |
| | 0 | Not met | | | |
| | 1 | Met/an external hoof care specialist is called if necessary | | | |
| **1.7** | **Daily on-farm self-assessments of the dairy herd are carried out.** | | | | |
| **M.C.** | 0 | Not met | | | |
| | 1 | Met | | | |
| **1.8** | **The cattle are kept in clean conditions** | | **1** | **1** | **1** |
| | 0 | Not met | | | |
| | 1 | Met | | | |
| **1.9** | **The cows' laying areas are clean and dry/the surfaces are as clean as possible.** | | **1** | **1** | **1** |
| | 0 | Not met | | | |
| | 1 | Met | | | |
| **1.10** | **The cows have sufficient laying areas.** | | | | |
| | 0 | Not met | | | |
| | 1 | Met/maximum of 10% overcrowding is acceptable | | | |
| | 2 | No overcrowding | | | |
| **1.11** | **Outdoor access or grazing should be possible.** | | | | |
| | 0 | Not met/tethering all year round | | | |
| | 1 | Met/open stall<br>Met/tethering + open yard and/or grazing possible from time to time | | | |
| | 2 | Stall + grazing and/or open yard available | | | |
| **1.12** | **Drinking water supply in order, sufficient and clean troughs.** | | **1** | **0** | **0** |
| | 0 | Not met | | | |
| | 1 | Met/tethering: cattle-operated water bowl at each stall; open stall: sufficient drinking possibilities available;<br>sufficient flow of water; troughs are well-cleaned | | | |

| | | | | | |
|---|---|---|---|---|---|
| **1.13** | **Stable climate: good air conditions** | | **1** | **0** | **0** |
| | 0 | Not met | | | |
| | 1 | Met/no signs of poor air conditions | | | |
| | 2 | Optimal air conditions thanks to extensive ventilation apertures (e.g. roller blinds, slatted boards) | | | |
| **1.14** | **Stable climate: good light conditions** | | **1** | **0** | **0** |
| | 0 | Not met | | | |
| | 1 | Met | | | |
| **1.15** | **Separate area for calving is available, and easy to clean** | | **1** | **0** | **0** |
| | 0 | Not met | | | |
| | 1 | Met | | | |
| **1.16** | **Suitable measures are carried out in order to determine the pregnancy status of inseminated cattle.** | | | | |
| | 0 | Not met/no measures nor documentation on insemination and pregnancy in the herd | | | |
| | 1 | Met/suitable measures are taken to determine the pregnancy status | | | |
| **1.17** | **The general housing conditions for the calves are good, the calves are adequately housed (for calves up to 14-days old).** | | **1** | **0** | **0** |
| | 0 | Not met | | | |
| | 1 | Met | | | |
| **1.18** | **Dehorning calves (removing fully grown horns) under the age of six weeks is accompanied by pain-reducing measures (administering analgesics and sedatives when necessary).** | | | | |
| | 0 | Not met | | | |
| | 1 | Met/the animal is genetically hornless | | | |
| **1.18** | **Preventing epidemics and disease: Measures are taken to reduce the introduction and spread of diseases and epidemics – housing the animals** | | | | |
| | 0 | Not met | | | |
| | 1 | Met | | | |
| **1.20** | **Preventing epidemics and disease: Measures are taken to reduce the introduction and spread of diseases and epidemics – access to the farm and herd** | | | | |
| | 0 | Not met | | | |
| | 1 | met/protective clothing is available on the farm for external persons: boots and overalls (or disposable footwear and clothing) | | | |
| | 2 | Additional changing and washing facilities are available and possibility for the milk tanker driver to directly access the milking room from outside | | | |
| **1.21** | **Stable has a sign that reads "Dairy herd – no access for unauthorised persons", "Valuable herd" or something similar.** | | | | |
| | 0 | Not met | | | |
| | 1 | Met | | | |
| **1.22** | **Should there be a power failure, the stable has an emergency generator or the holding could access such a generator quickly enough.** | | | | |
| | 0 | Not met | | | |
| | 1 | Met | | | |
| **1.23** | **The holding has taken appropriate precautionary measures in case of fire.** | | | | |
| | 0 | Not met | | | |
| | 1 | Met | | | |
| **1.24** | **Carcasses are kept in covered storage until they are collected by the rendering plant.** | | **0** | **0** | **1** |
| | 0 | Not met | | | |
| | 1 | Met | | | |
| **1.25** | **There are no recognisable shortcomings in the rearing conditions** | | **1** | **0** | **1** |
| | 0 | Not met | | | |
| | 1 | Met/less than 5% of the cattle with illnesses or injuries caused by the conditions in which they are reared or housed. | | | |
| | **Measures on udder health** | | | | |
| **1.26** | **If necessary, individual cell count checks are carried out.** | | | | |
| | 0 | Not met | | | |
| | 1 | Met/individual cell count checks in the event of doubt | | | |
| | 2 | Involved in a milk yield recording system or similar scheme and respects the upper limits for cell counts laid down in the regulation on milk quality | | | |
| **1.27** | **In suspicious cases, targeted checks are carried out.** | | | | |
| | 0 | Not met | | | |
| | 1 | Met/California Mastitis Test (CMT) or other similar testing method | | | |

| | | | | | |
|---|---|---|---|---|---|
| **1.28** | **Cows with a chronic infection or which are resistant to treatment are selected.** | | | | |
| | 0 | Not met | | | |
| | 1 | Met | | | |
| **1.29** | **Test results (from dairies, regional control bodies, etc.) prove that the raw milk was checked for its bacteria content, somatic cells and antibiotic residues. If permitted levels are exceeded, the milk producer takes appropriate measures to remedy the situation.** | | | | |
| | 0 | Not met | | | |
| | 1 | Met | | | |
| **1.30** | **Should teat dips or sprays that act as biocides be used, this must not infringe Regulation (EU) 528/2012.** | | | | |
| **M.C.** | 0 | Not met | | | |
| | 1 | Met | | | |
| **1.31** | **Measures are taken to ensure efficient, reduced-antibiotic treatment.** | | | | |
| | 0 | Not met | | | |
| | 1 | Met/veterinary consultations and treatments on udder health are carried out | | | |
| | 2 | Documents are available showing that tests to detect pathogens or resistance are carried out | | | |
| **2.** | **Animal identification and the farm register** | | | | |
| **2.1** | **In line with the VVVO, a farm register is kept, the animals identified, and changes to the herd notified** | | | | |
| **M.C.** | 0 | Not met | | | |
| | 1 | Met | | | |

| | | | | | |
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| **3.** | **Milk production and storage** | | | | |
| **3.1** | **Milking parlour or stanchion-tied stable (where the cows are milked)** | | | | |
| **3.1.1** | **Milking parlour and/or stall is constructed in a suitable way and location to limit the risk of contaminating the milk.** | | | | |
| | 0 | Not met | | | |
| | 1 | Met | | | |
| **3.1.2** | **The walls, floors, installations, doors, and surfaces are clean and easy to clean and disinfect. The surface of any tools and objects that may come into contact with the milk are clean and made of corrosion-resistant, non-toxic material, which is smooth, easy to clean and disinfect, and kept in a sound condition.** | | | | |
| | 0 | Not met | | | |
| | 1 | Met/walls and floors are tiled or specially treated in a similar way (e.g. with smear-proof paint) and well cleaned. Installations and tools have a smooth, rustproof surface and are kept clean. Stanchion-tied stable: Floor space is clean | | | |
| **3.1.3** | **Water waste disposal outlet is available.** | | **0** | **1** | **0** |
| | 0 | Not met | | | |
| | 1 | Met/tethering: grid or manure gutter with an outlet for liquid manure and regular manure removal; milking parlour: outlet and spray cleaning | | | |
| **3.1.4** | **The milking parlour (or stanchion-tied stable) is sufficiently lit and ventilated.** | | | | |
| | 0 | Not met | | | |
| | 1 | Met/pre-milking checks can easily be carried out, adjustable ventilation (also possible with sufficient windows) | | | |
| **3.1.5** | **The milking parlour (or stanchion-tied stable) has an appropriate and sufficient supply of drinking water.** | | **0** | **1** | **0** |
| | 0 | Not met | | | |
| | 1 | Met/running water available (regulation on drinking water is respected) | | | |
| **3.2** | **Milking equipment, clusters, and containers** | | | | |
| **3.2.1** | **The milking equipment is regularly serviced.** | | **1** | **1** | **0** |
| | 0 | Not met | | | |
| | 1 | Met/generally good condition, including pump; the parts subject to wear on the teat cup liners can be regularly exchanged (approximately 750 hours of operation or 1,500 for silicon) | | | |
| | 2 | In addition to regularly changing the wearable parts, there are protocols/test reports on monitoring the milking equipment according to DIN standards (not older than one year, milking equipment checks or after-sales service) | | | |
| **3.2.2** | **The tools and objects are cleaned, disinfected, and rinsed with drinking water after use.** | | **0** | **1** | **0** |
| | 0 | Not met | | | |
| | 1 | Met/rinsing facilities available; regularly cleaned and disinfected with DLG, DVG, or EN 1276 recognised/tested products; sufficient rinsing | | | |
| | 2 | Monthly checks and documentation on cleaning and disinfection (e.g. temperature, concentration, time), or a safety device that stops cleaning liquids ending up in the tank | | | |
| **3.3** | **Milking staff, milking, handling the milk** | | | | |
| **3.3.1** | **The milking staff wear clean, washable work clothing during milking. The milking staff wash their hands and forearms before milking and repeat if necessary.** | | | | |
| | 0 | Not met | | | |
| | 1 | Met | | | |
| **3.3.2** | **The udder must be clean at the beginning of milking.** | | **1** | **1** | **0** |
| | 0 | Not met | | | |
| | 1 | Met/clean udder cloths are available and used | | | |
| **3.3.3** | **The first few jets of milk from each teat are milked separately to check the appearance of each animal's milk and guarantee its flawless quality (pre-milking checks).** | | | | |
| **M.C.** | 0 | Not met | | | |
| | 1 | Met | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| 3.3.4 | **Cows that do not provide flawless milk are milked separately and their milk is not used for human consumption.** | | | | | |
| M.C. | 0 | Not met | | | | |
| | 1 | Met | | | | |

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| **3.4** | **Milking room** | | | | |
| **3.4.1** | **Access to the room is fixed and clean, and the parking space for the tanker is clean and has a solid floor.** | | **0** | **1** | **1** |
| | 0 | Not met | | | |
| | 1 | Met | | | |
| **3.4.2** | **The suction point can be reached with a hose of maximum 6 m.** | | | | |
| | 0 | Not met | | | |
| | 1 | Met/the farm's suction pipe that leads to the suction point must be cleaned as part of the regular cleaning procedure | | | |
| **3.4.3** | **The milking room is a closed space, sufficiently far from the stable, lockable, and constructed in a manner that ensures the milk cannot be adversely affected. It is protected against vermin, and all other animals are kept away.** | | **0** | **1** | **0** |
| | 0 | Not met | | | |
| | 1 | Met/constructed separately from the stable and manure yard Door to the stable can be locked | | | |
| **3.4.4** | **The milk is immediately cooled to no more than + 8°C if it is to be delivered on the day itself, or no more than + 6°C if not.** | | | | |
| **M.C.** | 0 | Not met | | | |
| | 1 | Met/cooling possible (direct evaporator, iced water, heat exchanger). Cooling temperature set correctly. | | | |
| **3.4.5** | **The milking room is free from all unrelated objects; cleaning and disinfection tools and products are stored in a separate room or cupboard. This does not apply to products that are in use.** | | **0** | **1** | **1** |
| | 0 | Not met | | | |
| | 1 | Met | | | |
| **3.4.6** | **The milk is transported to a clean milking room after milking. This is easy to clean and disinfect; sufficient facilities are available to dispose of waste water.** | | **0** | **1** | **1** |
| | 0 | Not met | | | |
| | 1 | Met/floors and walls are tiled or specially treated in a similar way and well cleaned. Waste outlet available | | | |
| **3.4.7** | **The milking room is sufficiently lit and ventilated.** | | | | |
| | 0 | Not met | | | |
| | 1 | Met/sufficiently ventilated No perceptible unpleasant odour At least one vent/window | | | |
| | 2 | Cooling unit housed separately from the milking room | | | |
| **3.4.8** | **The milking room has a sufficient supply of drinking water.** | | **0** | **1** | **0** |
| | 0 | Not met | | | |
| | 1 | Met/running water available (regulation on drinking water is respected) | | | |
| **4.** | **Feed** | | | | |
| **4.1** | **The farm uses solely compound feed and feed materials from companies that adhere to the requirements of the Feed agreement. All straight feed (feed materials) used must hail from the positive list or be permitted under other schemes which are recognised as equivalent by the system providers.** | | | | |
| **M.C.** | 0 | Not met | | | |
| | 1 | Met | | | |
| **4.2** | **All deliveries of feed are documented through itemised invoices, delivery certificates or other evidence. The documents contain details on the time of the delivery, as well as information on the quantity and nature of the feed. The address of the supplier should also be visible. This also applies to buying in feed produced on agricultural holdings. These documents must be kept for five years.** | | | | |
| **M.C.** | 0 | Not met | | | |
| | 1 | Met | | | |
| **4.3** | **There are no issues with the quality of the feed in the trough (e.g. no mould, no secondary fermentation, no old feed). Troughs and technical equipment (including feed provision systems) show no signs of long-lasting deposits or uncleanliness.** | | **1** | **1** | **1** |
| | 0 | Not met | | | |
| | 1 | Met | | | |
| **4.4** | **Animal and environmentally-friendly feed is supported by feed analyses (nutrient analyses) and calculation of feed rations.** | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| | 0 | Not met | | | | |
| | 1 | Met | | | | |
| **4.5** | **By storing feed for different species separately, any mixing of feedingstuffs is effectively prevented.** | | | | | |
| | 0 | Not met | | | | |
| | 1 | Met | | | | |
| **4.6** | **The manner of storage cannot impair the quality or safety of the feed.** | | | **1** | **1** | **0** |
| | 0 | Not met | | | | |
| | 1 | Met | | | | |
| **4.7** | **There is no visible sign of rodent infestation, or measures to control this have been taken.** | | | | | |
| | 0 | Not met | | | | |
| | 1 | Met | | | | |
| **5.** | **VMPs, residues** | | | | | |
| **5.1** | **Evidence on the VMPs that have been used is available.** | | | | | |
| **M.C.** | 0 | Not met | | | | |
| | 1 | Met | | | | |
| **5.2** | **VMPs are stored appropriately.** | | | | | |
| | 0 | Not met | | | | |
| | 1 | Met/VMPs are stored in a lockable room or in a separate cupboard. | | | | |
| **5.3** | There is a fixed procedure (e.g. colour marking, Velcro bands, electronic milk ban) so that when milking it is easy to recognise which cows have been treated. | | | | | |
| | 0 | Not met | | | | |
| | 1 | Met | | | | |
| **5.4** | **The milk from the cattle that have been treated is only delivered after the withdrawal period has ended. The use of inhibitor tests is recommended.** | | | | | |
| **M.C.** | 0 | Not met | | | | |
| | 1 | Met/compliance with the withdrawal period | | | | |
| | 2 | Additional inhibitor test after the withdrawal period | | | | |
| **5.5** | **Milk from treated cows is drawn off separately from the rest of the milk** | | | | | |
| **M.C.** | 0 | Not met | | | | |
| | 1 | Met/separate containers to milk the cows that have been treated are available | | | | |
| | 2 | The cows that have been treated are milked separately at the end | | | | |
| **5.6** | **When dairies and official bodies carry out harmful substance and residue analyses as stipulated under the regulation on contamination, the raw milk must not exceed any maximum values and there must be no resulting suspension of delivery.** | | | | | |
| **M.C.** | 0 | Not met | | | | |
| | 1 | Met | | | | |
| **5.7** | **Raw milk comes from animals that have not been administered any unauthorised substances according to Regulation 96/23/EC.** | | | | | |
| **M.C.** | 0 | Not met | | | | |
| | 1 | Met | | | | |
| **6.** | **The environment** | | | | | |
| **6.1** | **There is no unauthorised run-off of liquid slurry or manure into ground water or surface water.** | | | **0** | **0** | **1** |
| | 0 | Not met | | | | |
| | 1 | Met | | | | |
| **6.2** | **There is a nutrient comparison, as stipulated in the fertiliser regulation.** | | | | | |
| | 0 | Not met | | | | |
| | 1 | Met/there is a nutrient comparison | | | | |
| **6.3** | **The basic elements of phytosanitary legislation have been complied with.** | | | | | |
| | 0 | Not met | | | | |
| | 1 | Met/nothing in the residue monitoring | | | | |
| **6.4** | **The farm has an orderly appearance in terms of the farm environment, cleanliness and general conditions.** | | | **0** | **0** | **1** |
| | 0 | Not met | | | | |
| | 1 | Met | | | | |

**M.C.** → Criteria that absolutely must be met and are subject to follow-up checks pursuant to Tab. 6.8. should they not be met.