

And Still More to Say of Importance!

Counter to the unintellect and irrationality – in which intelligentum is absent – of all those stupidly-brazenly and irresponsible conspiracy theorists, mavericks, know-it-alls and troublemakers who pathologically act important in order to lead astray the human beings who think with intellect and rationality, by stupidly-brazenly seeking to trivialise the rampantly spreading corona disease and to portray the whole thing as lies and deceit or as under-handed government measures for quickly reducing the glaring overpopulation in a drastic form, such does not correspond to the truth, rather to a malicious and irresponsible, life-threatening delusion which consciously obfuscates the real truth and leads the human beings into irrationality and brings many human beings suffering, illness, grief, sorrow or even death.

In truth the fact is that the rampantly spreading corona disease is a real contagious and life-threatening infectious disease which brings about mass infections and mass deaths, which additionally cannot be countered with any medications and in this form can neither be fought nor healed. Medically speaking the solution can only be an appropriate and quality vaccine although such at the present time is unfortunately still uncertain for a comprehensive effect and guarantee of prevention, because lacking tests and experiences are still insufficient; consequently, more harm than benefit arises and even death as well as long-term damage and late effects can emerge from them which unfortunately already now shows itself and already confirms early predictions.

What can be done at the moment against the rampantly spreading corona disease and for one's personal health-based well-being as well as that of one's fellow human being shall be a duty for and be followed by every human being who is intelligentum-bearing, intellect-bearing and rationality-bearing because that is the single, real possibility of doing something for one's own protection and that of the fellow human beings against the aggressive coronavirus. And this alternative consists basically of the following realisable things:

1. The wearing of suitable respiratory protection masks which are adapted to correspond to the situation is to be adhered to absolutely everywhere that it is necessarily required.
2. When wearing respiratory protective masks one must pay attention to the necessity of taking them off from time to time in order to breathe fresh air for 10 to 15 minutes so that the lungs can recover again due to the strain of breathing through the mask.
3. The distance to keep from the next human being according to the conditions concerning the wind and persons – family, friendship, acquaintances, strangers – is approximately 2 metres as a rule.
4. Disinfection of the hands with a suitable disinfectant that is not chemical and does not contain chlorine, rather with approximately 70 – 75% alcohol, that is to say, ethanol, which has already been used since the 12th century and can be mixed at any concentration in water. One description clarifies that the most important active mechanism is the capability of the ethanol alcohol to change proteins, also with bacteria and some kinds of virus, which have a coating comprising different proteins. The SARS Cov-2 virus as the trigger of the rampantly spreading corona disease, has a shell of protein which is very well destroyable by a disinfectant made of ethanol. This disinfectant takes from the corona germ the possibility of being able to slip into the human organism; consequently it cannot get established and cannot multiply. Ethanol not only attacks the shell of bacteria and viruses, rather it also destroys the protein structure of fungi.

FFP-Respiratory Protection Masks

All FFP masks of FFP1, FFP2 and FFP3 correspond, as a rule, to respiratory masks which, as the name says, serve the protection of the respiratory tract and are to be disposed of after use. Depending on the class of masks in each case, respiratory protection masks, such as cheap and practically almost or totally useless paper masks or self-made, cheap material masks, can only be worn and used for a short time. According to the case – about which every person must decide themselves – protective masks can be used and worn for only a very short time; however, on the other hand, depending on the class of mask and its quality, each can accordingly be used and worn 8, 10 or 12 hours, and so forth, and protect the wearer, before they must be disposed of.

The fine, almost invisible fine-dust-particles or microorganisms, and so forth, which float around in the breathable air, belong, based on their size, to non-negligible dangers in the workplace as well as in regard to the protection of health against pathogens. Based on the danger of infectious diseases as well as radioactive contamination or cancer-causing substances such as bacteria and viruses, and so forth, protective masks designed for respiratory protection at work are also used for the protection against pathogens of all kinds, and indeed, on one hand, to protect the respiratory system in a lasting form and, on the other hand, the organism from germs so that no harm arises. Effectively this can only be guaranteed with suitable respiratory protection masks with adequate protective classes – so-called FFP masks – by means of which any long-term risks can be lowered or completely avoided.

In regard to suitable and good respiratory protective masks the brand 3M is the worldwide leader, whereby this label is noted as an abbreviation for the US American firm 'Minnesota, Mining and Manufacturing Company', thus 3xM. This firm is a multi-technology business which acts world-wide with headquarters in Saint Paul in the US federal state of Minnesota and is not only known by users as 3M, rather it is also, among other things, known by its registered brands 'Post-it' (little sticky notes) and 'Scotch'. The corporation produces more than 50,000 different products on the basis of 47 technology platforms and over 25,000 patents.

Why Respiratory Masks Must be Worn

Aerosols which are exhaled and saliva droplets, that is to say, smaller or greater amounts of secretion droplets, that is, expiration droplets of the mucous membranes in the mouth and nose which are expelled and released in the air when speaking, have mostly a diameter between 0.5 μm and 12 μm – μm stands for micrometre: = 1 micrometre = 1 millionth of a metre = 1 thousandth of a millimetre; in the past a μm was called micron or after the Greek letter μ My or Mü – in which case in particular the larger saliva or secretion droplets can contain infecting microorganisms. Microorganisms or a microorganism – a microbe, is a microscopically small single life form which is not visible to the naked eye. It is called micro if it is at least 2 dimensions smaller than about 30 μm . Most microorganisms are unicellular organisms, but they also include few-celled tiny life forms, that is to say, micro-life forms.

Microorganisms – and also many kinds of tiny material particles, seed dust and spores of all kinds – are almost or completely invisible substances which are suspended in the breathable air via which they are spread. The microorganisms are the most insidious health risks for the human being. However, particle-filtering half-masks offer protection against that kind of danger, in which case these masks are divided into three protective classes, FFP1, FFP2 and FFP3. The classification into three classes occurs through the abbreviation FFP, which stands for 'filtering face piece'. A respiratory protection mask covers nose and mouth and is composed of different filter materials and the mask itself.

The statements made by me are purely non-binding information to which it needs to be explained that the cited protective classes as a rule are suitable for different areas of use in work spaces, are used and in this regard, offering security, serve the corresponding minimum requirements in terms of safety. Basically the responsibility for the use of the masks lies with the person who uses the mask whereby, however, it is to be recommended that one examines these before use, and indeed whether the respiratory protective masks allow breathing and whether they correspond to the demands regarding the repulsion of the hazardous material and the user's air quality. For the choice of the right personal protective masks therefore, always an assessment of masks on location must be undertaken when purchasing, because if breathing difficulties arise with the wearing of the masks then neither the shop nor the manufacturer accept liability for any health difficulties or harm.

If hazardous substances and their concentration are known, a specific FFP mask can sometimes already be selected. The classification of masks is based not only on the filtering performance of the mask, but also on the maximum permissible leakage, which results from the leakage of the product, that is to say, the permeability of the filter material and the openings in places where the mask does not seal exactly on the face.

Respiratory protection masks protect the wearer from airborne harmful substances, such as respiratory toxins, particles, spores, dust and microorganisms and so forth, as well as bacteria, in which case the masks prevent such kinds of health endangering material from entering the respiratory tract, for example, during work, influenza, epidemics and pandemics. They are used especially at workplaces, in rescue services and by firefighters. In particular, respiratory protection masks are used in the nursing sector and during operations, in which case medical masks, that is to say, surgical masks, are used.

The Importance of Respiratory Protection

Hazardous particles may be more or less or very severely carcinogenic or radioactive, while others damage the body's respiratory system over decades and, under some circumstances, over a lifetime, leading to the long-term development of serious diseases. If the masks are used in work areas, then the workers in some circumstances only have to deal with unpleasant odours.

Respiratory protection masks provide protection in three classes, namely against aqueous and oily aerosols, smoke and fine dust during work, whereby with regard to their protective function the masks are standardised throughout Europe according to EN 149. Particle filtering half masks or fine dust masks are divided into three protection classes: FFP1, FFP2, FFP3.

Respiratory protection masks mainly protect against respirable dust, smoke and liquid mist – so-called aerosols – but not against vapour and gas. Aerosols are also exhaled by humans, just as humans also excrete droplets of

saliva when they speak. Consequently, other human beings can inhale aerosols and droplets again and thus be infected with pathogens.

Respiratory protection masks serve two purposes with infectious agents or other contagious diseases, such as influenza, epidemics and pandemics:

1. Wearing protective masks prevents sick persons from releasing aerosols into the air in an uninhibited form as a result of breathing and speaking, which are inhaled by other persons who are therethrough infected with germs and also fall ill.
2. By wearing protective masks, healthy persons are prevented from ingesting foreign bodies such as toxins or germs, but they are also prevented from becoming infected with the germs of sick other persons through exhaled aerosols and expelled expiratory droplets of the latter, and from falling ill themselves, which, however, respiratory masks are designed to prevent.

A respiratory protection mask is composed of various filter materials and the mask itself, and this covers the nose and mouth. Basically, such masks are designed for various work activities, namely at workplaces where the occupational exposure limit of dust, smoke and aerosols, and so forth, in the breathing air is exceeded. This means that respiratory protection masks prevent the inhalation of excessive concentrations of such health-damaging substances, which under some circumstances can lead to serious damage to a human's health or to death. If therefore a certain concentration of harmful substances of any kind is exceeded, especially with regard to infectious germs, then, as a rule, the wearing of respiratory protection masks is a duty according to personal responsibility as well as *intelligentum*, intellect and rationality.

Respiratory Protection Masks With or Without Valve

- 1) Respiratory protection masks that do not have a valve filter both the fresh air from the outside that is breathed in as well as the used air that is depleted of oxygen, thus providing self-protection and protection for others for the person wearing the mask.
- 2) General protective masks with a valve only filter the inhaled air and consequently serve only for personal protection of the person wearing a protective mask, which is why the valve masks are not designed for protection of others.
- 3) Special respiratory protection masks – which are not larger than normal nose-mouth masks and are more expensive (200 dollars and more) – additionally have a small electric motor to regulate the intake/supply of air, while the valve does not only expel and filter inhaled air, rather also the used exhalation with up to fivefold filtration.
- 4) Respiratory protection masks with expiration valves are not suitable for those persons who are positively ill, because the used breath streams out unhindered through the valve and therethrough can spread the released disease pathogens all around in the air.

The same kind of masks which are used for the execution of work are also absolutely serviceable against infectious pathogens; consequently, they are also used in relation to this to prevent pathogens from being able to get into the respiratory tract and mucous membranes, multiplying there and bringing about disease. Accordingly, in this regard, certain classes of masks are to be selected in order to guarantee the best possible protection.

The significant classes of protection, FFP1, FFP2 and FFP3, offer – depending on the overall leakage, that is to say, the permeability of the mask materials and the filtering of particle sizes up to 0,6 µm – a respiratory protection for different concentrations of material pollutants, poisons, spores, particles, microorganisms, bacteria, smoke and fumes and so forth, however not from gasses, radiation such as radioactivity, or from vibrations/swinging waves.

According to the grade of the mask, good respiratory protection masks can offer up to 94% or a maximum of 96% certain safety against viruses, whereby, however, it must be clear that an absolute security against viruses cannot be; viruses also cannot be killed but can only be destroyed, because they are not life forms, rather they are lifeless organic structures. Only living things can be killed, however not lifeless organisms.

In regard to the overall-leakage, that is to say, the filter allowing things to pass through and the leakiness of the materials of the respiratory protection mask, as well as how it seals around the face and nose, it is also important that the mask must be fitted to the human anatomy, that is to say, that it is fitted to the face as much as possible.

With that also an innovative filter technology of the mask is important because there must be little breath resistance and the breathing itself must not be made difficult due to particles stuck in the filter after multiple uses of the respiratory protection mask.

Classes of Respiratory Protection Masks

FFP1: Respiratory protective masks of the class FFP1 can only be applied in the environmental areas in which no poisonous or fibrogenic, that is to say, protein-aerosols, are present. The fourfold workplace threshold for respiratory protective masks of the class FFP1 must not be surpassed, and additionally the protective masks are predominantly only useful for the short term and must be frequently changed as soon as moisture attaches to them due to breathing and talking, as they must when dealing with human beings, because they are only designed for a short period and additionally only for a weak protection against aerosols and saliva droplets.

- a) Respiratory protection masks of the protection class FFP1 are, as a rule, suitable for work environments in which exclusively non-toxic materials exist. They have a separation efficiency of 80% and are designed and useful for approximately 4 times in excess of a workplace polluting in terms of pollutants such as dust and other non-toxic substances.
- b) Respiratory protective masks of the protective class FFP1 are in no form at all suitable in regard to toxic substances, bacteria, gasses or viruses of any kind; rather these masks protect solely against material particles, such as, among other things, against non-toxic forms of dust such as cellulose, cement, gypsum, lime, spores or pollen, and so forth.
- c) As a rule, fabric masks of every kind, also self-made ones, correspond – in the best case – to the mask-protective class FFP1, however they are absolutely useless against pathogens of any kind; consequently, such kinds of masks offer no kind of protection at all against pathogens and for that reason should neither be manufactured nor used. Basically such kinds of masks only have the effect of false pretences, that is to say, illusorily as a delusion, in regard to a protective function against pathogens.

FFP2: Respiratory protection masks of the protective class FFP2 are designed for work environments in which materials which damage health and alter genetic make-up exist and are suspended in the breathable air. This class of mask is designed to capture at least 94% of airborne particles and therefore must be used with work when the harmful substance threshold of the relevant hazardous material reaches up to 10 times the permitted concentration at most.

- a) **Respiratory masks of the class FFP2 should, in each case, when infectious germs are in circulation, be responsibly used for personal protection and for the protection of the fellow human beings.**
- b) Respiratory protection masks of the class FFP2 have a filtration efficiency of approximately 92% which indicates the effectiveness of the protective mask, that is to say, its rejection, that is to say, the entering of foreign substances into the respiratory tract. The higher the filtration efficiency of the respiratory protection mask is, the better the filter performance correspondingly is.
- c) Generally, in regard to the filtration efficiency, one also has to understand the proportion of the amount, that is to say, the concentration of the foreign material which is filtered, that is to say, retained in the filter system of the mask and is prevented from being able to penetrate the respiratory tract. And still more simply put, it all means that the degree of filtering describes what is stopped and retained at the front of the mask; consequently it cannot penetrate the mask and cannot enter the respiratory tract.
- d) Respiratory protection masks of the protective class FFP2 also protect against poisonous/toxic kinds of dust, such as calcium oxide, concrete dust, granite or zinc oxide fumes.
- e) Respiratory protection masks of the protective class FFP2 protect to a large extent also against bacteria, and also against viruses to a certain degree.
- f) Respiratory protection masks of the protective class FFP2 also protect against diverse, health endangering and gene changing matter still unknown to science, in the breathable air.

FFP3: Respiratory protection masks of the protection class FFP3 offer a good protection even with high pollution of the breathing air and, according to Plejaren research results, have a filtering achievement of 94% to 96%, however not 98% to 99% as is claimed according to wrong terrestrial-virological data. These percentage calculations say that therefore absolutely no 100% safety can be given that in the worst case an infection by disease

pathogens cannot take place. With 94% or 96%, however, the safety level is very high, which means that there is no need for big worries about infection, but this does not mean that therefore wearing masks and keeping one's distance can be neglected or stopped.

- a) Respiratory protection masks of the protection class FFP3 are to be used in work environments in which a threshold of poisonous materials has surpassed up to thirtyfold the industry-specific value; consequently, for example, it protects from poisonous kinds of dust such as chrome, cobalt, nickel or mould spores.
- b) Respiratory protection masks of the protection class FFP3 are very suitable against toxic, carcinogenic and radioactive particles, as well as especially against bacterial, viral, micro-organic and many other pathogens. To repeat, it is to be said again, in order to understand clearly: with a degree of separation of 94% to 96% – according to Plejaren certain/sure research results, which are certainly much more exact-precise in contrast to the earthly-scientific research result claims of 98-99% – the FFP3 mask, with a proper fit of the mask, thus very largely withholds many types of health-hazardous particles, toxins and microorganisms as well as bacteria and viruses. This is the reason why FFP3 masks are also applied and used in laboratories while handling viruses and bacteria, as well as for many manual work processes and also for special chemical as well as medical necessities.

Difference Between the Respiratory Protection Masks FFP2, FFP3, N95, KN95

If the respiratory protection standard of the respiratory protection masks of the classes FFP2, FFP3, KN95, N95 are compared with each other, then some differences result.

Respiratory protection masks with and without filters come worldwide under various strict regulations and standards, whereby they must have certain required and specific characteristics and the corresponding performance characteristics according to the corresponding standard, and thus these must be appropriate to the respiratory protective masks.

All respiratory protection masks of the classes FFP2, FFP3, N95, KN95, P2 and DS are tested and designed to also protect mask wearers to a certain degree against infectious germs, thus from bacteria, many types of microorganisms and viruses.

An epidemic or pandemic corresponds at any time and in any case to an emergency situation, in which not only long-term and effective measures such as lockdown, the strict wearing of respiratory masks and keeping distance from person to person must be observed, but quite especially the use of specifically designed respiratory protection masks, which provide the highest possible safety from infection by germs such as bacteria, microorganisms and viruses. The following are suitable and recommended:

In particular, there are the respiratory protection masks with the designation **3M**, namely of the class type **FFP2** and **FFP3**, which have been tested to separate bio-aerosols, such as viruses, equivalently, that is to say, adequately well, or to withhold them at and with the mask.

Respiratory protection masks of this standard, of the **class type 3M FFP2, N95**, are particularly recommended, as well as other equivalent products however, such as the respiratory protection masks listed below, which are suitable up to 94% or even 96%, filter out particles contained in the breathing air up to a size of 0.6 µm, as well as bacteria, microorganisms and viruses.

These masks are also suitable for filtering various air pollutants of all kinds, but not against gases, radiation and vibrations/swinging waves:

KN95 (China GB2626-2006)

P2 (Australia/New Zealand AS/NZS 1716:2012)

FFP2 (Europe EN 149-2001)

N95 (United States NIOSH-42CFR84)

DS (Japan JMHLW-Notification 214, 2018)

Korea 1st class (Korea KMOEL – 2017-64)

Respiratory masks of **class FFP3** correspond to the international standard and have a somewhat higher filtering performance, which according to Plejaren research results provides a filtration of up to 96% (contrary to the terrestrial test claim of 99.5%), therefore, in any case, even with this best possible mask there is absolutely no 100% guarantee of elimination of germs, at least as far as viruses are concerned, but this type of FFP3 mask also protects against toxic dust, such as chromium, cobalt, nickel or mould spores, and so forth.

Masks that can largely protect from viruses up to 94% and 96%

The following respiratory protection masks, which offer a still somewhat better protection than the other named types, have a filtering, that is to say, separation result of up to 94% or 96%.

FFP2, N95, KN95, P2, DS and FFP3

Surgical Masks

Medical Face masks

Surgical masks consist as a rule of multilayer, air-filtering fleece material which on the outside partly has a water-resistant layer. These protective masks are either secured at the back of the head with bands or with elastic loops secured at the ears and have to be worn so that the mouth and nose are covered.

These surgical protection masks are disposable products and in regard to their filtering result are designed to the Euro norm EN 14683.

The medical, that is to say, surgical face masks, which are also called 'surgical masks' as well as 'OP masks' or 'Hygiene masks' and have the designation standard EN 14683, are medical devices and therefore have to be marked with CE. Unfortunately, everywhere on the market, fake, inferior products of this and other kinds are on offer and sold, which are not in conformity with the medical face masks, rather only allegedly correspond to the conforming and tested products; consequently they also do not offer the protection which is promised.

SSSC, 20.1.2021, 5:33 pm, Billy

Excerpt from Wikipedia:

Use of Mouth-nose-coverings, Medical Face Masks and Particle Filtering Half Masks (FFP-Masks)

The Corona pandemic (SARS-CoV-2 pandemic) and the Covid-19 illnesses triggered by the virus have changed our everyday lives considerably. One of the most obvious changes comes from the now mandatory wearing of masks in many areas. By wearing the masks, citizens can do their part to prevent the unhindered spread of the so-called 'coronavirus' (SARS-CoV-2). This should reduce the transmission of the virus from person to person and subsequently the risk of a possible infection.

There are various types of masks, some of which differ significantly in their design and protective effect.

Wearing masks is always just one part of a comprehensive protection plan with which we are working together to combat the spread of the coronavirus. Therefore, the 'AHA+L' formula still applies: keep your distance, pay attention to hygiene, wear an everyday mask and aerate.

When using masks, the following should be considered:

The masks currently used in infection control are basically divided into three types:

1. There are **mouth-nose coverings**, for example, also called everyday mask, makeshift mouth-nose mask; community mask.
2. The **medical face masks** known from the medical everyday life, colloquially, for example, also called OP masks, mouth-nose protection, face mask. These are 'medical devices'.
3. And the **particle-filtering half masks** – which until now have been known from the realm of manual work – also known colloquially as respiratory protection masks, FFP masks. The name FFP is an abbreviation of the English name of the masks 'Filtering Face Piece'. These masks belong to the product category 'Personal Protective Equipment' (PPE).

Mouth-Nose Covering

Everyday masks or mouth-nose coverings are usually fabric masks that can be very varied in their appearance. They are often sewn from commercially available fabrics and worn in everyday life. Since they do not belong to the category of medical devices or personal protective equipment, there are no requirements from laws or technical standards on filtering performance that they must meet. However, they should be made to cover the mouth and nose and fit as closely as possible to the face at the edges.

Mouth-nose coverings, unlike medical face masks or particle-filtering half masks, are not tested according to corresponding legal and normative requirements. They can therefore be placed on the market without these official procedures. For the materials used in the manufacture of these masks there are therefore no legal requirements, e.g. for filtering performance, but there may be requirements, e.g. for the freedom from harmful substances of the textiles used. In most cases these masks are sewn from commercially available fabrics. Their appearance and imperviousness are correspondingly varied, as the fabrics used differ in design and material properties. They are worn in everyday life and therefore in everyday speech are often called everyday mask.

The distinction from medical devices or personal protective equipment is important. Everyday masks may not be advertised with corresponding performance or protective effects, because they did not have to undergo testing procedures according to such requirements. Therefore, everyday masks must not be sold as medical devices or personal protective equipment.

Everyday masks do not provide the performance evidence defined in the technical standards as required for medical face masks and particle-filtering half masks. Thus, they generally provide less protection than these regulated and tested mask types. However, this does not mean that they have no protective effect. Internationally, there are numerous scientific publications that confirm the experience gained about the effectiveness of the mouth-nose coverings in terms of general protection of the population. Thereby protective effect of the masks depends on the tightness and quality of the material used, the adaptation to the shape of the face and the number of layers of fabric. For example, tightly woven fabrics are more suitable than lightly woven fabrics in this context. Thus, according to current knowledge, the correct wearing of good everyday masks can significantly reduce the risk of exposure to droplets containing pathogens.

A special group of everyday masks are those manufactured according to a special standard, the European 'CEN Work-shop Agreement CWA 17553'.

While these masks are also everyday masks and therefore neither personal protective equipment nor medical devices with corresponding mandatory testing requirements and regulatory oversight, the CWA still imposes specific performance requirements on these masks. They must filter at least 70% or 90% of particles with a diameter of $3 (\pm 0.5)$ micrometres.

Although a separate standard is used here, these masks, like other everyday masks, are not subject to any special official or other regulatory supervision such as medical devices or personal protective equipment. The manufacturer is solely responsible for the implementation of the specifications. Nevertheless, this marking can be a mark of quality if the standard is applied correctly.

Medical Face Masks

Medical face masks, mouth-nose protection (MNS), often also called surgical masks, are disposable products that are normally used in everyday clinical practice or in doctors' offices. They consist of special synthetics and have a multilayer structure. They are very similar in appearance: rectangular shape with wrinkles so that the mask can adapt to the face. The front side (outside) is usually coloured, the back side (inside) is not. The masks have ear loops and a wire nose clip. They have clearly defined filtering properties.

Medical face masks are medical devices and were developed for the protection of others. They primarily protect someone who is adjacent to the wearer of the face mask from their emitted infectious droplets. However, when fitted tightly, medical face masks can also protect the wearer of the mask, even though this is not their actual function. In hospitals, for example, they are used to prevent droplets from the doctor's breathing air from getting into a patient's open wounds.

Translation: Vivienne Legg; corrections by Vibka Wallder and Christian Frehner.