

安全鞋产品使用说明书

产品名称	防护性能
安全鞋	足趾保护(200J)+防静电

一、产品特点:

- 鞋头的保护使用防砸包头,检验依据GB21148-2020标准6.2要求,本鞋可承受(200±4)J的冲击和(15±0.1)kN的静压,能有效保护足趾免受伤害。
- 优质大底,具有耐磨、耐折、耐弱酸碱、轻便等优点(PU底的安全鞋不能用于有大量液体的工作场合)。
- 内里材料为网布,透气性佳,同时使鞋子看上去具有立体感。
- 鞋帮高度<103mm-121mm为低帮多功能安全鞋,轻巧方便、行动灵活、外形时尚;
鞋帮高度≥103mm-121mm为中帮多功能安全鞋,鞋帮介于低帮与高帮之间,能更好的保护脚踝处不被扭伤。
- 防静电性能:检验依据GB21148-2020标准6.4.2要求,电阻值应大于100kΩ和小于或等于1000MΩ。
- 防滑性:检验依据GB21148-2020标准5.2.5要求,在带有洗涤剂溶液的陶瓷砖面上,后跟向前滑动的摩擦系数大于等于0.28,水平向前滑动的摩擦系数大于等于0.32。
- 多功能自由搭配、组合。

二、建议使用时间:

通常安全鞋的鞋底由PU材料或橡胶材料制成,这些材料随着时间、使用环境以及穿着者的穿着习惯在物理和化学特性上会产生变化,使得安全鞋的耐磨、胶粘牢度、硬度、舒适性等功能方面逐步减弱。因此,使用者(和仓管人员)应时常留意安全鞋的使用时间、鞋面、鞋底的磨损状况,一旦受到重压或重砸造成鞋内包头变形及鞋底出现软化、熔融等不得再作为安全鞋使用。

自生产日期起,超过36个月的产品应按照标准GB21148-2020进行检验,符合国家规定测试标准方可销售和使用。

三、产品应用:

适用于钢铁、建筑、电力、汽车制造、机械加工等作业场所。

四、注意事项:

- 不耐强酸、强碱,不适用于经常接触化学品等有腐蚀性介质的场所。
- 不能长期在高温、涉水环境下使用,否则会严重影响其使用寿命,甚至断底。
- 定期清理安全鞋,但不应采用溶剂作清洁剂,同时要尽量避免用水直接冲洗,清洗时用软毛刷或微湿抹布除去鞋上灰尘与污物,然后置通风处晾干。
- 面料为皮革时需经常给鞋面上油,防止皮革龟裂老化。
- 鞋底亦须经常清扫,避免积聚污垢物,因鞋底导电性或防静电效能会受粘附污垢物多少和曲折情况而影响。

- 在储存时,应存放在干燥通风的仓库内,存放温度不得超过50°C。防止霉变,堆放离开地面,墙壁0.2m以上,离开一切发热体1m以外。避免受油,酸碱类或其他腐蚀品的影响。
- 使用者应根据使用场所与防护要求,选择相应的安全鞋。
- 如果必须通过消散静电荷来使静电积累减至最小,从而避免诸如易燃物质和蒸气的火花引燃危险,同时,如果来自任何电器或带电部件的电击危险尚未完全消除,则必须使用防静电鞋。然而,要注意由于防静电鞋仅仅是在脚和地面之间加入一个电阻,不能保证对电击有足够的防护。如果电击的危险尚未完全消除,避免这种危险的附加措施是必要的。这类措施与下面提到的附加测试一样应成为工作场所事故预防程序的例行部分。

经验表明,对于防静电用途,在鞋的整个使用期限内的任何时间,通过产品的放电路径通常应有小于1000 MΩ的电阻。在电压达到250 V操作时,万一出现任何电器故障,为确保对电击或引燃危险提供一些有限的保护,新鞋的电阻最低限值规定为100 kΩ。然而在某些情况下,使用者应知道鞋可能提供不充分的保护且应始终采取附加措施以保护穿着者。

这类鞋的电阻会由于屈挠、污染或潮湿而发生显著变化。如果在潮湿条件下穿用,鞋将不能实现其预定的功能。因而必须确保产品在整个使用期限内能实现其消散静电荷的设计功能并同时提供一些保护。建议使用者建立一个内部电阻测试并定期经常地使用它。

如果延长穿用周期, I 类鞋能吸潮并在潮湿条件下导电。

如果在鞋底材料被污染的场所穿用鞋,穿着者每次进入危险区域前应经常检查鞋的电阻值。

- 在使用防静电鞋的场所,地面电阻不应使鞋提供的防护无效。
- 在使用中,鞋内底与穿着者的脚之间不得有绝缘部件。如果内底和脚之间有鞋垫,则应检查鞋/鞋垫组合体的电阻值。

五、鞋垫:

产品均提供了可移动鞋垫,测试是鞋垫在鞋内时进行的,并且不允许有任何不与鞋底边缘贴合的操作(如移位、卷曲、滑动、尺寸不符等)。鞋只在适当位置使用鞋垫及鞋垫最好由原鞋制造商提供的同等鞋垫代替。

六、无害性申明及相关安全性信息:

我司产品选用的原材料以及加工制作过程的各种化学助剂,满足GB/T31009-2020中对限量物质要求和安全性要求的规定,并对上述声明内容及相关技术支撑文件的真实性、完整性、一致性负责。

七、执行标准:

GB21148-2020

Operation Instruction for Safety Shoes

Product Name	Protective Performance
Safety Shoes	Anti-Impact+Anti-Static

I. Product Features:

- Safety shoes using toe cap can effectively protect the toes from injury under pressure of $[15\pm 0.1]KN$ or impact energy of $[200\pm 4]J$. Inspection according to the standard GB21148-2020 requirements of 6.2.
- The high-quality outsole features good resistance to wear, folding, weak acids and alkali, and light weight, etc. (The safety shoes of PU sole are not suitable for a workplace containing a lot of liquid).
- The lining material is mesh cloth, which has good air permeability and makes the shoes look three-dimensional. If the height of the upper is less than 103-121mm, it is a pair of low-cut safety shoes which is light and stylish.
- If the height of the upper is no less than 103-121mm, it is a pair of middle-cut safety shoes with better protection of the ankles from sprains.
- Anti-static performance: Inspection according to the standard GB21148-2020 requirements of 6.4.2, The resistance value should be greater than $100k\Omega$ and $\leq 1000M\Omega$.
- Skid resistance: according to the standard GB21148-2020 requirements of 5.2.5, on the ceramic tile surface with detergent solution, the friction coefficient of heel sliding forward is greater than or equal to 0.28, and the friction coefficient of horizontal sliding forward is greater than or equal to 0.32.
- The multi-function safety shoes can be used in any combination.

II. Recommended usage time:


Generally, the sole of safety shoes is made of PU or rubber. These materials will change in physical and chemical properties with time, using environment and wearer's wearing habits, gradually weakening the wear resistance, adhesive fastness, hardness, comfort and other functions of safety shoes. Therefore, The users (and the warehouse keepers) should always pay attention to the service time of safety shoes and the wear conditions of the upper and the sole. Once they are heavily pressed or smashed, resulting in deformation of toe cap in shoes and softening and melting of soles, they should not be used as safety shoes again. The products over 36 months shall be inspected according to the standard GB21148-2020, and can be sold and used only when they meet the specified standards.

III. Application of product:

Suitable for steel, construction, electric power, automobile manufacturing, machining and other industries.

IV. Notes:

- The shoes are not resistant to strong acid and alkali, and thus not suitable for places with frequent exposure to corrosive media such as chemicals.
- The shoes cannot be used in environment with high temperature and wading environment for a long time, otherwise its service life will be seriously affected and even the bottom will be broken.
- Clean the safety shoes regularly, but never use solvents as the cleaning agents. Try to avoid direct flushing with water. When cleaning, remove the dust and dirt on the shoes with a soft brush or slightly wet rag, and then place them in a ventilated place to dry.

 This item is consumable, and is not covered under SATA lifetime warranty.

- In case of leather upper, apply oil to the upper on a regular basis, so as to prevent the leather from cracking and aging.
- Always clean the sole frequently to avoid accumulation of dirt, which together with the folding condition may affect the anti-static performance.
- During storage, it shall be stored in a dry and ventilated warehouse, and the storage temperature shall not exceed 50°C. To prevent mildew the shoes should be stored more than 0.2m away from the ground and the wall, and 1m away from all heating elements. Avoid being affected by oil, acid, alkali or other corrosive products.
- Users should select correct safety shoes according to the using place and protection requirements.
- If electrostatic charge must be dissipated to minimize electrostatic accumulation, such as flammable substances and the danger of spark ignition from steam, and the danger of electric shock from any electrical appliance or live part is not completely eliminated, must use anti-static shoes. With only one resistor between the foot and the ground, the anti-static shoes cannot provide 100% protection against electric shock. If the danger of electric shock is not completely eliminated, additional measures to avoid this danger are necessary. Such measures are the same as the additional tests mentioned below should be a routine part of workplace accident prevention procedures. Experience shows that for anti-static use, the shoe is placed through the product at any time throughout its life electrical paths usually have a resistance of less than $1000M\Omega$. When the voltage reaches 250 V, in case of any electrical appliances fault, to ensure that some limited protection is provided against electric shock or igniting hazards, new shoe resistance minimum limits are regulated $100K\Omega$. However, in some cases, users should be aware that the shoes may provide inadequate protection and should always use additional measures to protect the wearer. The electrical resistance of such shoes can change significantly due to flexing, contamination or moisture. If worn in wet conditions, the shoe will not be able to perform its intended function. Therefore, it is necessary to ensure that the product can be realized throughout its life. It is designed to dissipate static charge while providing some protection. Users are advised to build an internal resistor test and use it regularly. Class I shoes can absorb moisture and conduct electricity in wet conditions if you extend the use time. If shoes are to be worn in an area where the sole material is contaminated, the wearer should check the resistance of the shoe frequently before entering a hazardous area.
- In places where anti-static shoes are used, the ground resistance shall not invalidate the protection provided by the shoes.
- In use, there shall be no insulating parts between the insole and the wearer's feet. If there is a shoe-pad between the sole and the foot, check the resistance value of the shoe / insole assembly.

V. Shoe-pad(insole):

All products are provided with removable insole. The test was done with the insole inside the shoe. It is not allowed to operate insole that does not fit the edge of sole (such as displacement, curling, sliding, inconsistent size, etc.) Insoles should be used in the right place and the old insole had better be replaced by the same manufacturer.

VI. Harmlessness declaration and relevant safety information:

We here declare that the raw materials selected for our products and various chemical auxiliaries in the processing process meet the requirements of GB/T31009-2020. And responsible for the authenticity, integrity and consistency of the above statement and related technical supporting documents.

VII. Executive standard:

GB21148-2020