



Standard Specification for Eye Protective Devices for Paintball Sports¹

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INTRODUCTION

This is the specification for eye protective devices, or EPD, to be used in the sport of paintball. Paintball is a sport that, like all sports, has intrinsic hazards. These hazards include being hit by paintballs. Protective equipment cannot eliminate all injuries but will substantially reduce their severity and frequency. Participation in this sport by a player implies acceptance of injury risk. The goal of protective equipment is to minimize the risk of injury.

Performance requirements are presented and are intended to minimize injury with minimal impairment of the form and appeal of the sport. This specification is subject to revision as indicated by subsequent injury statistics.

The impact requirements are designed to give eye and adnexal protection from paintball impacts likely to be encountered under game conditions. While the EPD also may protect the user from other potential impacts, such as running into tree branches, there are many conceivable impacts, including falls from heights, which could exceed the specification and result in eye injury despite the use of the EPD.

1. Scope

1.1 This specification applies to eye protective devices, designed for use by players of the sport of paintball, that minimize or significantly reduce injury to the eye and adnexa due to impact and penetration of paintballs.

1.2 Eye protective devices meeting the requirements of this specification offer protection to the eyes and adnexa and not necessarily to any other parts of the head.

1.3 The values stated in SI units are to be regarded as the standard. The values given in parentheses are for information only.

1.4 *This standard does not purport to address all of the safety concerns, if any, associated with its use. It is the responsibility of the user of this standard to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use.*

1.5 This specification does not limit the wearing of eyeglasses or contact lenses when used in conjunction with the EPD.

2. Referenced Documents

2.1 ASTM Standards:

¹ This specification is under the jurisdiction of ASTM Committee F08 on Sports Equipment and Facilities and is the direct responsibility of Subcommittee F08.57 on Eye Safety for Sports.

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D 1003 Test Method for Haze and Luminous Transmittance of Transparent Plastics²

F 803 Specification for Eye Protectors for Use by Players of Racquet Sports³

2.2 ANSI Standards:

Z80.3 Requirements for Nonprescription Sunglasses and Fashion Eyewear⁴

Z87.1 Practice for Occupational and Educational Eye and Face Protectors⁴

2.3 Federal Standards:⁵

No. 406

No. 3022

3. Terminology

3.1 Definitions of Terms Specific to This Standard:

3.1.1 *adnexa, n*—adjunct parts of the eye, including the orbit, orbital contents, eyelids, and the lacrimal apparatus.

3.1.2 *astigmatism, n*—a condition in a lens that creates two axially separated line foci of each object point, the lines being mutually perpendicular. In other words, the lens has two different refractive powers in meridians that are 90° apart.

² *Annual Book of ASTM Standards*, Vol 08.01.

³ *Annual Book of ASTM Standards*, Vol 15.07.

⁴ Available from American National Standards Institute, 11 W. 42nd St., 13th Floor, New York, NY 10036.

⁵ Available from Standardization Documents Order Desk, Bldg. 4 Section D, 700 Robbins Ave., Philadelphia, PA 19111-5094, Attn: NPODS.