



MATERIAL SAFETY DATA SHEET (MSDS)

Galvanized Steel Guardrail

Product Name: Highway / Road Guardrail

Product Type: Galvanized Steel Safety Barrier

Supplier: Basekim Company

Recommended Use: Road, highway, bridge and industrial safety barriers

1. Hazard Identification

The finished guardrail is a solid metal article and is not normally classified as a hazardous chemical.

Main hazards:

- Sharp edges may cause cuts.
- Heavy sections may cause lifting or crushing injuries.
- Cutting, grinding or welding may produce metal dust and fumes.
- Hot metal may cause thermal burns.
- Zinc-containing fumes may be produced during welding or high-temperature work on galvanized surfaces.

2. Composition

Component	Typical Information
Base Material	Carbon / structural steel
Surface Coating	Hot-dip galvanized zinc coating
Other Elements	Grade-dependent

Exact steel grade and zinc coating must be confirmed by the project specification.

3. First-Aid Measures

Dust/Fume Inhalation: Move the person to fresh air. Obtain medical attention if coughing or breathing discomfort continues.

Eye Contact: If dust or particles enter the eyes, rinse carefully with clean water. Obtain medical attention if irritation persists.



Skin Injury: Clean cuts and abrasions and obtain medical treatment when necessary.

Burns: Cool the affected area with clean running water and obtain appropriate medical attention.

4. Firefighting Measures

The finished steel guardrail is non-combustible.

Use extinguishing media appropriate for surrounding materials.

High temperatures may generate metal oxide fumes.

5. Handling

- Wear protective gloves when handling beams and posts.
- Use appropriate lifting equipment for heavy sections.
- Secure components during transportation and installation.
- Avoid uncontrolled cutting or grinding.
- Maintain adequate ventilation during welding or thermal cutting.
- Keep work areas clear of loose components.

6. Storage

- Store on a stable and level surface.
- Secure stacked beams against movement or falling.
- Protect components from excessive mechanical damage.
- Keep away from corrosive chemicals where possible.

7. Personal Protection

Eyes: Safety glasses or face protection during cutting or grinding.

Hands: Cut-resistant work gloves.

Feet: Safety footwear.

Body: Suitable protective work clothing.

Respiratory: Appropriate respiratory protection where metal dust or welding fumes cannot be adequately controlled by ventilation.



8. Physical Properties

Property	Information
Appearance	Metallic galvanized steel sections
Colour	Silver / metallic grey
Physical State	Solid
Odour	Odourless
Water Solubility	Insoluble
Flammability	Non-combustible
Corrosion Protection	Galvanized zinc coating

9. Stability and Reactivity

Stable under normal conditions.

Avoid prolonged contact with strong acids and other highly corrosive chemicals.

Cutting, welding or extreme heating may generate metal oxide fumes.

10. Environmental Information

The finished product presents a low environmental hazard under normal use.

Steel and zinc-coated components should be recycled at the end of their service life where possible.

11. Disposal

Recycle as metal scrap whenever practical.

Dispose of contaminated material according to applicable local regulations.

12. Transport Information

Guardrails are generally not classified as dangerous goods for transport.

Secure beams, posts and accessories properly to prevent movement or falling during transportation.



13. Important Notice

This document provides general safety information for galvanized steel guardrails. Exact steel composition, galvanizing specification, dimensions and installation requirements must be confirmed by the applicable project specification and manufacturer documentation.