

Material Safety Data Sheet Rev 0

Section 1: Product and company information

Product: Precision Ground Flat Stock of tool steel grade no. 1.2363 – AISI A 2
Solid product with ground or milled surface for various uses in the tool and die industry

Supplier: Steel Service Krefeld (USA), Inc.
2109 West Market Street, Suite 152
Johnson City
Washington County
Tennessee 37604
USA
Fon: +1-514-447-1671
info@steelservicekrefeld.com

Section 2: Potential Hazards

General Statement

REACH-Regulation EG 1907/2006 differentiates between „articles“ and „substances“. According to its definition Precision Ground Flat Stock is considered to be an article. REACH defines articles as follows:

An object which during production is given a special shape, surface or design which determines its function to a greater degree than does its chemical composition. Any articles manufactured from this solid product will be generally classified as non- hazardous.

However, processing operations on the product like cutting, milling, grinding or processing in any other manner may create potentially hazardous dust or fumes which may be inhaled, swallowed or may come in contact with skin or eyes. The inhaling of dusts, fumes or mists generated during the different production processing steps may be dangerous to health. The product is usually slightly oil coated to protect it from rust.

Preventive measures

- Protective equipment shall be worn when required.
- Hand gloves should be worn when handling the products.



16-March-2021

- Eye and face protection should be worn when processing.
- Dust and/ or fumes which may eventually come up when processing should not be inhaled. Respiratory protection should be worn in any case of inadequate ventilation.

Section 3: Chemical composition

Components:

| | | CAS No. | Chemical composition |
|----|-------------|----------------|-----------------------------|
| Fe | Iron | 7439-89-6 | Base |
| C | Carbon | 7440-44-0 | 0.95 – 1.05% |
| Si | Silicon | 7740-21-3 | 0.10 – 0.50% |
| Mn | Manganese | 7439-96-5 | 0.40 – 1.00% |
| P | Phosphorous | 7723-14-0 | 0.00 – 0.03% |
| S | Sulphur | 7704-34-9 | 0.00 – 0.03% |
| Cr | Chromium | 7740-47-3 | 4.75 – 5.50% |
| V | Vanadium | 7440-62-2 | 0.15 – 0.50% |
| Mo | Molybdenum | 7440-33-7 | 0.90 – 1.40% |

Trace elements may be existing in minute amounts. They are referred to as „trace“ or „residual“ elements and may exist in the raw materials used.

Section 4: First Aid Measures

A steel product like Precision Ground Flat Stock (Gauge Plate) is not likely to create any acute or chronic health effects. However, fumes or dust arising during cutting, milling or grinding may cause irritations, difficulty breathing or allergic skin reactions.

Description of first aid measures

- Inhalation: Move to fresh air and if condition will not improve consult a doctor.
- Eye Contact: in order to remove existing particles flush eye/s immediately with running water. Keep eyes wide open while rinsing. Consult a doctor if irritation will remain.
- Skin Contact: If any irritation will develop brush off excess dust and wash effected area with soap and water to remove any particles.
- Ingestion: Do not induce vomiting and consult a doctor if larger quantities have been ingested.

Indication of any immediate medical indication

No additional information available for this product.



16-March-2021

Section 5: Fire Fighting Measures

The product is nonflammable – no explosion hazard.

Section 6: Accidental Release Measures

No specialized clean up procedures needed.

Section 7: Handling and Storage

Handling: Avoid sharp edges or heated material and avoid dust particles during the machining processes.

Storage: No special storage requirements needed

Section 8: Limitation and Monitoring of Exposure/ Personal Protection Measures

During any machining processes of the product a good ventilation is recommended to keep airborne concentration of dust and fumes at acceptable levels.

Eye and Face Protection: Wear safety glasses during cutting, milling or grinding operations. Use face shields when welding or burning.

Hand Protection: Wear gloves when handling sharp edges of the product.

Respiratory Protection: Wear approved dust/ mist/ fume respirator during welding or burning operations on the product (FFP 2 or FFP 3 EN 149).

Other Protective Equipment: Use appropriate protective clothing as required such as fire retardant clothes or aprons during welding or burning processes.

Section 9: Physical and Chemical Properties

Information about basic physical and chemical properties of the product

| | |
|-----------------|-------------------------------------|
| Appearance: | solid product with metallic surface |
| Odor: | odorless |
| Odor threshold: | not applicable |
| Vapor pressure: | not applicable |
| Vapor density: | not applicable |
| Melting point: | 1.530°C |
| Boiling point: | not applicable |
| Solubility: | not soluble |

Steel Service Krefeld (USA), Inc. – www.steelservicekrefeld.com



16-March-2021

| | |
|----------------------------|-------------------|
| Flash point: | not applicable |
| Evaporation rate: | not applicable |
| Flammability: | nonflammable |
| Explosive limits: | not applicable |
| Relative density: | 7.85 |
| Partition coefficient: | no data available |
| Auto-ignition temperature: | no data available |
| Decomposition temperature: | no data available |

Additional information

Above values are typical values and are not considered a specification.

Section 10: Stability and Reactivity

| | |
|-------------------------------------|--|
| Reactivity/ Stability: | stable product under normal storage conditions |
| Possibility of hazardous reactions: | will not occur |
| Incompatible products: | strong acids |
| Hazardous decomposition products: | not applicable |

Section 11: Toxicological Information

| | |
|-----------------------------|--|
| Lethal Dose/ Concentration: | none established |
| Mutagenicity: | not applicable |
| Teratogenicity: | not applicable |
| Reproductive effects: | not applicable |
| Carcinogenic: | no data about carcinogenic of the product available. However, fumes, mists or dusts generated by processing the product may be carcinogenic if inhaled over a longer period of time. |

Section 12: Ecological Information

No adverse ecological effects known.



16-March-2021

Section 13: Disposal Considerations

Recyclable scrap may be disposed by scrap dealers. Non-recyclable scrap to be disposed according to local, state and/ or federal regulations.

Section 14: Transport Information

There are no regulations – special transport instructions don't exist.

Section 15: Regulatory Information

As mentioned in the General Statement the product is not hazardous according to the definition of REACH 1907/ 2006. However, fumes and dusts generated while processing the product may be hazardous and require protection to comply with different applicable laws and regulations.