

Safety Data Sheet

Sample: Tool steel/High speed steel/Cutting tools

Model No: N/A

Client Unit: JIANGSU TIANGONG TOOLS COMPANY LIMITED

Client Address: HONGXIANG, DANBEI TOWN, DANYANG CITY, JIANGSU PROVINCE,
CHINA

Written by:

Sophia Li

Inspected by:

[Signature]

Approved by:

Mike Zeng



Comtest Lab for physical & chemical analysis

Safety Data Sheet

Section 1 – Chemical Product and Company Identification

Trade Name: Tool steel/High speed steel/Cutting tools**Article number:** N/A**Manufacture/Supplier:**

JIANGSU TIANGONG TOOLS COMPANY LIMITED

HONGXIANG, DANBEI TOWN, DANYANG CITY, JIANGSU PROVINCE, CHINA

Fax No: 86-511-86322967 Tel No: 86-511-86319338

Further information obtainable from:

JIANGSU TIANGONG TOOLS COMPANY LIMITED

Information in case of emergency:

HONGXIANG, DANBEI TOWN, DANYANG CITY, JIANGSU PROVINCE, CHINA

Fax No: 86-511-86322967 Tel No: 86-511-86319338

E-mail: qianxiang_gong@tiangong-tools.com

Chemical use:

For making hot forging die, hot extrusion die, die-casting die etc; for making cold heading die, cold extrusion die etc.

Section 2 – Composition/Data on component

Description: Mixture of the substance listed below with nonhazardous additions.

Chemical Name	CAS No.	EC No.	Weight (%)
Carbon	7440-44-0	231-153-3	0.28 ~ 2.2
Silicon	7440-21-3	231-130-8	0 ~ 1.4
Manganese	7439-96-5	231-869-6	0 ~ 2
Phosphorus	7723-14-0	231-768-7	0 ~ 0.04
Sulphur	7704-34-9	231-722-6	0 ~ 0.12
Chromium	7440-47-3	231-157-5	0 ~ 18
Molybdenum	7439-98-7	231-107-2	0 ~ 10

Trade name: Tool steel/High speed steel/Cutting tools

Chemical Name	CAS No.	EC No.	Weight (%)
Nickel	7440-02-0	231-111-4	0 ~ 3.4
Vanadium	7440-62-2	231-171-1	0 ~ 4.5
Tungsten	7440-33-7	231-143-9	0 ~ 18.7
Copper	7440-50-8	231-159-6	0 ~ 1.2
Aluminum	7429-90-5	231-072-3	0 ~ 1.3
Cobalt	7440-48-4	231-158-0	0 ~ 8.75
Others	N/A	N/A	0 ~ 1.36
Iron	7439-89-6	231-096-4	70.48 ~ 98.6

Section 3 – Hazards Identification

Hazard description: Not applicable.

Information pertaining to particular dangers for man and environment:

The product has to be labeled due to the calculation procedure of international guideline.

Classification system:

The classification was made according to the latest editions of international substances lists, and expanded upon from company and literature data.

NFPA ratings (scale 0 - 4)



Health = 0

Fire = 0

Reactivity = 0

HMIS-ratings (scale 0 - 4)



Health = 0

Fire = 0

Reactivity = 0

Section 4 – First Aid Measures

After inhalation: No need.

After skin contact: IMMEDIATELY wash with water and soap and rinse thoroughly.

After eye contact: Rinse opened eye for several minutes under running water. Then consult a doctor.

After swallowing: If symptoms persist consult doctor

Trade name: Tool steel/High speed steel/Cutting tools

Section 5 – Fire Fighting Measures

Special hazards arising from the product: The product itself does not burn.

Suitable extinguishing agents: Use fire fighting measures that suit the environment

Protective equipment: Wear fully protective suit

Section 6 – Accidental Release Measures

Person-related safety precautions: See protective measures under Sec 7&8.

Measures for environmental protection:

Do not allow product to reach sewage system or any water course.

Measures for cleaning/collecting:

Just pick up.

Additional information: See Section 7 for information on safe handling.

Section 7 – Handling and Storage

Handling:

Information for safe handling:

Ensure good ventilation/exhaustion at the workplace. Be careful when it is heavy.

Information about protection against explosions and fires:

No need.

Storage:

Requirements to be met by storerooms and receptacles:

Store in a normal temperature location, and avoid direct sunshine.

Information about storage in one common storage facility:

Store away from foodstuffs.

Section 8 – Exposure Controls and Personal Protection

Personal protective equipment:

General protective and hygienic measures:

The usual precautionary measures for handling chemicals should be followed.

Breathing equipment:

No need.

Protection of hands:

Trade name: Tool steel/High speed steel/Cutting tools



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.

Material of gloves

Normal working gloves.

Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

Eye protection:

No need.

Section 9 – Physical and Chemical Properties

General Information

Form: Solid

Color: Black or silvery

Odor: Odorless

Melting point/Melting range: 1200 ~ 1500°C

Boiling point/Boiling range: No data

Flash point: Not applicable

Flammability (solid, gaseous): Non-flammable

Auto igniting: Not applicable

Danger of explosion: Not available

Explosion limits:

Lower: Not available

Upper: Not available

Oxidizing properties: Not available

Vapor pressure: Not available

Density: ~ 8.20 g/mm³

Relative density: 7.4 ~ 8.8

Vapour density: Not available

Evaporation rate: Not available

Solubility in / Miscibility with

Water: Can not soluble in water

pH-value: No data

Trade name: Tool steel/High speed steel/Cutting tools

Section 10 – Chemical Stability and Reactivity Information

Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.

Materials to be avoided: Strong oxidizing agents, strong acid and strong base

Dangerous reactions: No dangerous reactions known.

Dangerous products of decomposition: Metal oxides.

Section 11 – Toxicological Information

Additional toxicological information:

The product is not subject to classification according to internally approved calculation methods for preparations:

When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

Section 12 – Ecological Information

Additional ecological information:

General notes:

Water hazard class 0 (Self-assessment): No hazardous for water

Do not allow product to reach ground water, water course or sewage system.

Section 13 – Disposal Considerations

Product:

Recommendation:

Smaller quantities can be disposed of with household waste.

Uncleaned packagings:

Recommendation: Disposal must be made according to official regulations.

Section 14 – Transportation Information

Maritime transport IMDG:

· IMDG Class: N/A

· UN Number: N/A

· Label N/A

Trade name: Tool steel/High speed steel/Cutting tools

- Packaging group: N/A
- EMS Number: N/A
- Marine pollutant: NO
- Proper shipping name: N/A

Section 15 – Regulatory Information

Law information:

<<Technical Instructions for the Safe Transport of Dangerous Goods>>

<<Dangerous Goods Regulation>> (IATA)

<<International Maritime Dangerous Goods>>

OSHA Hazards

TSCA Status

DSL Status

SARA 302/311/312/313

In accordance with all Federal, State and Local laws

Product related hazard informations:

The product has not been classified and marked in accordance respective national laws. Observe the general safety regulations when handling chemicals.

Section 16 – Other Information

The contents and format of this MSDS/SDS are in accordance with 29 CFR 1910.1200(g)

DISCLAIMER OF LIABILITY

The information in this MSDS/SDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or methods of handling, storage, use or disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in anyway connected with the handling, storage, use or disposal of the product. This MSDS/SDS was prepared and is to be used only for this product. If the product is used as a component in another product, this MSDS/SDS information may not be applicable.