福建沃尔法化学科技有限公司
Fujian Wolfa Chemical Technology Co., Ltd

DESIGN REPORT OF SAFETY DATA SHEET

Revision Date: Aug.19, 2025

Name of the sample	CHROMIUM HEXACARBONYL
Applicant	Fujian Wolfa Chemical Technology Co., Ltd.
Supplier	Fujian Wolfa Chemical Technology Co., Ltd.
Composition of the sample	CHROMIUM HEXACARBONYL: ≥99%
Warranty of Design	GLOBALLY HARMONIZED SYSTEM OF CLASSIFICATION AND LABELLING OF CHEMICALS (GHS) Eleventh revised edition
Design Result of SDS please see next page.	

Notes:This SDS is valid before the implementation of the Twelfth revised edition GHS.

Section 1 Product and Company Identification

> Product Identifier

Product Name	CHROMIUM HEXACARBONYL
Synonyms	——
CAS No.	13007-92-6
EC No.	235-852-4
Molecular Formula	$Cr(CO)_6$

> Relevant Identified Uses of the Substance or Mixture and Uses Advised Against

Relevant Identified Uses	Please consult manufacturer.
Uses Advised Against	Please consult manufacturer.

> Details of the Supplier of the Safety Data Sheet

Applicant Name	Fujian Wolfa Chemical Technology Co., Ltd.
Application Address	Room 2620, Building 18, Xingguang Plaza, No.970 Anji South Road, Fengze District, Quanzhou City, Fujian Province
Applicant Post Code	362000
Applicant Telephone	+86-17854166533
Applicant Fax	——
Applicant E-mail	——
Supplier Name	Fujian Wolfa Chemical Technology Co., Ltd.
Supplier Address	Room 2620, Building 18, Xingguang Plaza, No.970 Anji South Road, Fengze District, Quanzhou City, Fujian Province
Supplier Post Code	362000
Supplier Telephone	+86-17854166533
Supplier Fax	——
Supplier E-mail	——

> Emergency Phone Number

Emergency Phone Number	+86-17854166533

Section 2 Hazards Identification

Hazard class and label elements of the product according to GHS (the Eleventh revised edition):

> GHS Hazard Class

Acute Toxicity – Oral	Category 3,H301

> GHS Label Elements

Pictogram



Signal Word Danger

> Hazard Statements

H301 Toxic if swallowed

> Precautionary Statements

Prevention

P201 Obtain special instructions before us

P202 Do not handle until all safety precautions have been read and understood

P261 Avoid breathing dust/fume/gas/mist/vapours/spray

P264 Wash hands/skin thoroughly after handling

P270 Do not eat, drink or smoke when using this product

P272 Contaminated work clothing should not be allowed out of the workplace

P280 Wear protective gloves/protective clothing/eye protection/face protection

Response

P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician

P302+P352 IF ON SKIN: wash with plenty of soap and water

P308+P313 IF exposed or concerned: Get medical advice/attention

P330 Rinse mouth

P363 Wash contaminated clothing before reuse

Storage

P405 Store locked up.

Disposal

P501 Dispose of contents/container in accordance with local/regional/national/ international regulations.

Section 3 Composition/Information on Ingredients

Component	CAS No.	EC No.	Concentration (weight percent, %)
CHROMIUM HEXACARBONYL	13007-92-6	235-852-4	≥99

Section 4 First Aid Measures

> Description of First Aid Measures

General Advice	Show this safety data sheet to the doctor in attendance.Seek immediate medical advice.
Eye Contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
Skin Contact	Wash off immediately with plenty of water for at least 15 minutes. Immediate medical attention is required.
If Swallowed	Do NOT induce vomiting. Call a physician or poison control center immediately. If vomiting occurs naturally, have victim lean forward.
If Inhalation	Remove to fresh air. If not breathing, give artificial respiration. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Immediate medical attention is required. Risk of serious damage to the lungs (by aspiration).

> Most Important Symptoms and Effects, both Acute and Delayed

May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause allergic skin reaction. Symptoms of allergic reaction may include rash, itching, swelling, trouble breathing, tingling of the hands and feet, dizziness, lightheadedness, chest pain, muscle pain or flushing: Vapors may cause drowsiness and dizziness

> Indication of Any Immediate Medical Attention and Special Treatment Needed

1. Provide targeted treatment based on the symptoms that appear.
2. Note that symptoms may be delayed.

Section 5 Fire Fighting Measures

> Extinguishing Media

Suitable Extinguishing Media Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

> Specific Hazards Arising from the Substance or Mixture

Chromium oxides.

> Advice for Firefighters

1. Wear self-contained breathing apparatus for firefighting if necessary.
2. Extinguish the fire at a safe distance and with adequate protection.
3. Prevent fire-fighting water from contaminating surface and groundwater systems.

Section 6 Accidental Release Measure

> Personal Precautions, Protective Equipment and Emergency Procedures

1. Ensure adequate ventilation. Remove all ignition sources.
2. Evacuate personnel to a safe area immediately, keeping away from the leakage area and staying upwind.
3. Use personal protective equipment. Avoid inhaling vapors, fumes, gases or dust.

> Environmental Precautions

1 Prevent further leakage or spillage if safe to do so.

2 Do not let product enter drains.

> Methods and Materials for Containment and Cleaning Up

1 For small leaks, dry sand or inert absorbent materials can be used to absorb the spill. In case of a large leak, dikes should be built to control it.

2 Attachments or collected materials should be stored in appropriate sealed containers and disposed of according to local laws and regulations.

3 Eliminate all ignition sources and use spark-proof tools and explosion-proof equipment.

Section 7 Handling and Storage

> Precautions for Handling

1 Handling in a well ventilated place. Wear suitable protective clothing. Avoid contact with skin andeyes. Avoid formation of dust and aerosols. Use non-sparking tools. Prevent fire caused byelectrostatic discharge steam.

> Conditions for safe storage, including any incompatibilities

1 Store the container tightly closed in a dry, cool and well-ventilated place. Store apart from foodstuffcontainers or incompatible materials.

Section 8 Exposure Controls/Personal Protection

> Control Parameters

Occupational Exposure Limit Values

No information available

Biological Limit Values

No information available

Monitoring Method

1 EN 14042 Workplace air - Guidelines for procedures used to assess exposure to chemical or biological reagents

2 GBZ/T 160.1~GBZ/T 160.81-2004 Determination of Toxic Substances in Workplace Air (Series of Valid Standards)

> Engineering Controls

1 Maintain adequate ventilation, especially in enclosed areas.

2 Ensure that there are eye-washing and shower facilities near the workplace.

3 Use explosion-proof electrical appliances, ventilation, lighting and other equipment.

4 Set up emergency evacuation routes and necessary risk relief areas.

> Personal Protection Equipment

Eye/Face Protection	Wear tightly fitting safety goggles with side-shields conforming to EN 166(EU) or NIOSH (US).
Skin Protection	Wear chemical protective gloves (such as butyl rubber gloves). It is recommended to choose protective gloves that have passed the testing of EU EN 374, US F739, and S/NZS 2161.1 standards.

BodyProtection	Wear flame-retardant and anti-static protective clothing and anti-static protective boots.
Respiratory Protection	When the concentration exceeds the exposure limit, workers must use appropriate respirators. To protect the wearer, respiratory protective equipment must be properly fitted, and should be used and maintained correctly.
Control of Environmental Exposure	Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

Section 9 Physical and Chemical Properties

Appearance: Solid

Odor: No information available

Odor Threshold: No information available

pH: No information available

Melting Point/Freezing Point (℃): Melting point/range: 154 ℃

Initial Boiling Point and Boiling Range (℃): 220℃

Flash Point (℃): No information available

Evaporation Rate: No information available

Flammability: No information available

Upper/lower Explosive Limits[%(v/v)]: Upper limit: No information available; Lower limit: No information available

Vapor Pressure (KPa): No information available

Relative Vapour Density(Air=1): No information available

Relative Density(Water=1): 1.770 g/cm^3

Solubility: No information available

n-Octanol/Water Partition Coefficient: No information available

Auto-Ignition Temperature(℃): No information available

Decomposition Temperature (℃): No information available

Kinematic Viscosity (mm^2/s): No information available

Particle Characteristics: No information available

Critical Temperature(℃): No information available

Section 10 Stability and Reactivity

Reactivity	Contact with incompatible substances may cause decomposition or other chemical reactions.
Chemical Stability	Stable under recommended storage conditions.
Possibility of Hazardous Reactions	It will not occur during normal handling.
Conditions to Avoid	Incompatible substances, heat, flames, and sparks.
Incompatible Materials	Strong oxidizing agents.
Hazardous Decomposition Products	Under normal storage and usage conditions, no hazardous decomposition products will be produced.

Section 11 Toxicological Information

> Acute Toxicity

Acute Toxicity – Oral：Category 3

> Skin Corrosion/Irritation

No information available

> Serious Eye Damage/Irritation

No information available

> Respiratory or skin Sensitization

No information available

> Germ Cell Mutagenicity

No information available

> Carcinogenicity

Suspected carcinogen

> Reproductive Toxicity

No information available

> Specific target organ toxicity -single exposure

No information available

> Specific target organ toxicity -repeated exposure

No information available

> Aspiration hazard

No information available

Section 12 Ecological Information

> Acute Aquatic Toxicity

No information available

> Chronic Aquatic Toxicity

No information available

> Others

Persistence and Degradability	No information available
Bioaccumulative Potential	No information available
Mobility in Soil	No information available
Results of PBT and vPvB Assessment	No information available

Section 13 Disposal Considerations

> Waste treatment methods

Waste Products	Refer to national and local regulations before disposal.
Contaminated Packaging	Dispose of in accordance with local and national regulations. Before discarding used containers, thoroughly empty the contents.
Disposal Considerations	Please refer to the Waste Chemicals and Contaminated Packaging sections.

Section 14 Transport Information

Transporting Label	
Marine Pollutant	No
UN Number	3466
UN Proper Shipping Name	METAL CARBONYLS,SOLID,N.O.S.（CHROMIUM HEXACARBONYL）
Transport Hazard Class	6.1
Transport Subsidiary Hazard Class	NONE
Packing Group	III

Section 15 Regulatory Information

> International chemical inventory

Component	EINECS	TSCA	DSL	IECSC	NZIoC	PICCS	KECL	AIIC	ENCS
CHROMIUM HEXACARBONYL	√	√	×	√	√	√	√	√	×

【EINECS】 European Inventory of Existing Commercial Chemical Substances

【TSCA】 Toxic Substances Control Act

【DSL】 Domestic Substances List

【IECSC】 Chinese Chemical Inventory of Existing Chemical Substances

【NZIoC】 New Zealand Inventory of Chemicals

【PICCS】 Philippines Inventory of Chemicals and Chemical Substances

【KECL】 Korean Existing Chemicals List

【AICS】 Australian Inventory of Chemical Substances

【ENCS】 Existing Chemicals Substances Inventory

Note

"√" Indicates that the substance included in the regulations

"×" That no data or included in the regulations

Section 16 Additional Information

Preparation Date	Dec.1, 2022
Revision Date	Aug.19, 2025
Revision Reason	SDS Update Section

Disclaimer

The information provided in this Safety Data Sheet is correct based on the latest knowledge, information and concepts available to us. The information provided is intended only as a guide for safe operation, use, processing, storage, transportation, disposal and discharge and is not intended as a guarantee or specification of quality. This information is only used for the specific substance specified and may not be suitable for mixing with any other substance or in all cases, unless otherwise specified in the context.