

# SAFETY DATA SHEET

**Date of Issue:** Jan 20, 2017**Technical Review Date:** Jan 20, 2017**Version:** D0001.001

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## Section 1 - Product and Company Identification

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#### A. Product name

- **SM** (Chromium)

#### B. Recommended use and restriction on use

- General use : NOT AVAILABLE.

- Restriction on use : NOT AVAILABLE.

#### C. Manufacturer / Supplier / Distributor information

##### o **Manufacturer**

##### **information**

- Company name : DON CO., LTD
  - Address 1 : 157, GUNGPYEONG-RI, DOCHEOK-MYEON
  - Address 2 : GWANGJU-SI, GYEONGGI-DO, KOREA
  - Dept. : QUALITY CONTROL DEPT.
  - Telephone number : 82-31-769-2475(DON HEAD OFFICE)
  - Emergency telephone number : 82-31-769-2475 (443)
  - Fax number : 82-31-769-2479
  - E-mail address : dcresearch@don21c.com
- ##### o **Supplier/Distributor information**
- Company name : DON CO., LTD
  - Address 1 : 157, GUNGPYEONG-RI, DOCHEOK-MYEON
  - Address 2 : GWANGJU-SI, GYEONGGI-DO, KOREA
  - Dept. : OVERSEAS SALES/BUSINESS/MARKETING DEPT.
  - Telephone number : 82-31-769-2475(DON HEAD OFFICE)
  - Emergency telephone number : 82-31-769-2475 (407)
  - Fax number : 82-31-769-2479
  - E-mail address : don@don21c.com
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## Section 2 - Hazards Identification, Including Emergency Overview

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**A. Hazard classification**

NOT CLASSIFIED AS HAZARDOUS ACCORDING TO OSHA HAZARD COMMUNICATION STANDARD, 29 CFR 1910.1200.

**B. Label elements**

- **Signal word**  
NOT APPLICABLE.
- **Symbols**  
NOT APPLICABLE.
- **Pictograms**  
NOT APPLICABLE.

**B. Other hazards**

NONE KNOWN.

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**Section 3 - Composition/Information on Ingredients****SM**

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**A. Ingredient Name: Chromium**

NAME	%	CAS NO	CLASSIFICATION
Chromium ( <b>SM</b> )	99.98	7440-47-3	N/A

\* EXACT PERCENTAGES ARE BEING WITHHELD AS A TRADE SECRET.

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**Section 4 - First Aid Measures****SM**

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**A. Description of first-aid measures**

- **Inhalation**  
AFTER INHALATION: FRESH AIR.
- **Skin contact**  
AFTER SKIN CONTACT: TAKE OFF IMMEDIATELY ALL CONTAMINATED CLOTHING.  
RINSE SKIN WITH WATER/SHOWER.
- **Eye contact**  
AFTER EYE CONTACT: RINSE OUT WITH PLENTY OF WATER.
- **Ingestion**

AFTER SWALLOWING: MAKE VICTIM DRINK WATER (TWO GLASSES AT MOST).

**B. Most important symptoms and effects, both acute and delayed**

WE HAVE NO DESCRIPTION OF ANY TOXIC SYMPTOMS.

**C. Indication of any immediate medical attention and special treatment needed**

NO INFORMATION AVAILABLE.

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**Section 5 - Fire Fighting Measures**

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**A. Extinguishing media**

○ **Suitable extinguishing media**

SPECIAL POWDER AGAINST METAL FIRE, COVER WITH DRY SAND OR CEMENT.

○ **Unsuitable extinguishing media**

WATER, FOAM, CARBON DIOXIDE (CO<sub>2</sub>)

**B. Special hazards arising from the substance or mixture**

COMBUSTIBLE.

RISK OF DUST EXPLOSION.

**C. Advice for firefighters**

○ **Special protective equipment for fire-fighters**

IN THE EVENT OF FIRE, WEAR SELF-CONTAINED BREATHING APPARATUS.

**D. Further information**

NO INFORMATION AVAILABLE.

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**Section 6 - Accidental Release Measures**

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WEAR APPROPRIATE PROTECTIVE DEVICES (SEE SECTION 8 EXPOSURE CONTROLS/  
PERSONAL PROTECTION). AVOID CONTACT WITH EYES AND SKIN.

DO NOT INHALE THE PRODUCT.

**A. Environmental precautions**

NO SPECIAL PRECAUTIONARY MEASURES NECESSARY.

**B. Methods and materials for containment and cleaning up**

OBSERVE POSSIBLE MATERIAL RESTRICTIONS.

AVOID GENERATION OF DUSTS.

**C. Reference to other sections**

SEE SECTION 7 FOR INFORMATION ON SAFE HANDLING.

SEE SECTION 8 FOR INFORMATION ON PERSONAL PROTECTION EQUIPMENT.

SEE SECTION 13 FOR DISPOSAL INFORMATION.

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**Section 7 - Handling and Storage****SM**

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**A. Precautions for safe handling**

OBSERVE LABEL PRECAUTIONS.

**B. Conditions for safe storage, including any incompatibilities**

STORE IN COOL, DRY CONDITIONS IN WELL SEALED RECEPTACLE.

PROTECT FROM CONTAMINATION.

PROTECT FROM HEAT AND DIRECT SUNLIGHT.

STORE LOCKED UP.

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**Section 8 - Exposure Controls & Personal Protection****SM**

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**A. Exposure limits(s)**○ **ACGIH**

TIME WEIGHTED AVERAGE(TWA) - THRESHOLD LIMITS: 0.5 mg/m<sup>3</sup>

○ **NIOSH/GUIDE**

RECOMMENDED EXPOSURE LIMIT(REL) - THRESHOLD LIMITS: 0.5 mg/m<sup>3</sup>

○ **OSHA\_TRANS**

PERMISSIBLE EXPOSURE LIMIT(PEL) - THRESHOLD LIMITS: 1.0 mg/m<sup>3</sup>

○ **Z1A**

TIME WEIGHTED AVERAGE(TWA) - THRESHOLD LIMITS: 1.0 mg/m<sup>3</sup>

○ **OSHA/Z2**

NO INFORMATION AVAILABLE.

**B. Engineering controls**

TECHNICAL MEASURES AND APPROPRIATE WORKING OPERATIONS SHOULD BE GIVEN PRIORITY OVER THE USE OF PERSONAL PROTECTIVE EQUIPMENT.

**C. Personal protective equipment**

- **Respiratory protection**

REQUIRED WHEN DUSTS ARE GENERATED.

- **Eye/face protection**

USE EQUIPMENT FOR EYE PROTECTION TESTED AND APPROVED UNDER APPROPRIATE GOVERNMENT STANDARDS SUCH AS NIOSH (US)

- **Hand protection**

CHEMICAL-RESISTANT, IMPERVIOUS GLOVES COMPLYING WITH AN APPROVED STANDARD SHOULD BE WORN AT ALL TIMES WHEN HANDLING CHEMICAL PRODUCTS IF A RISK ASSESSMENT INDICATES THIS IS NECESSARY.

- **Hygiene measures**

CHANGE CONTAMINATED CLOTHING. APPLICATION OF SKIN- PROTECTIVE BARRIER CREAM RECOMMENDED. WASH HANDS AFTER WORKING WITH SUBSTANCE.

- **Others**

NO INFORMATION AVAILABLE.

### Section 9 - Physical & Chemical Properties

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<b>A. Physical state</b>	SOLID(GRANULE)
<b>B. Color</b>	NOT APPLICABLE.
<b>B. Odor</b>	ODORLESS
<b>C. Odor threshold</b>	NOT APPLICABLE.
<b>D. pH</b>	NOT APPLICABLE.
<b>E. Melting point/Freezing point</b>	~1,875 °C - lit.
<b>F. Initial Boiling Point/Boiling Ranges</b>	NO INFORMATION AVAILABLE.
<b>G. Flash point</b>	NO INFORMATION AVAILABLE.
<b>H. Evaporation rate</b>	NO INFORMATION AVAILABLE.
<b>I. Flammability(Solid, gas)</b>	NO INFORMATION AVAILABLE.
<b>J. Upper/Lower Flammability or explosive limits</b>	NO INFORMATION AVAILABLE.
<b>K. Vapor pressure</b>	NO INFORMATION AVAILABLE.

<b>L. Solubility</b>	NO INFORMATION AVAILABLE.
<b>M. Vapor density</b>	NO INFORMATION AVAILABLE.
<b>N. Specific gravity</b>	7.2 g/mL
<b>O. Partition coefficient of n-octanol/water</b>	NO INFORMATION AVAILABLE.
<b>P. Autoignition temperature</b>	NO INFORMATION AVAILABLE.
<b>Q. Decomposition temperature</b>	NO INFORMATION AVAILABLE.
<b>R. Viscosity</b>	NOT APPLICABLE.
<b>S. Molecular weight</b>	51.99 g/mol

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### Section 10 - Stability & Reactivity Data

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#### A. Reactivity

NO INFORMATION AVAILABLE.

#### B. Chemical stability

STABLE UNDER RECOMMENDED STORAGE CONDITIONS.

#### C. Conditions to avoid

NO INFORMATION AVAILABLE.

#### D. Incompatible materials

STRONG ACIDS, STRONG OXIDIZING AGENTS.

#### E. Hazardous decomposition products

HAZARDOUS POLYMERIZATION WILL NOT OCCUR.

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### Section 11 - Toxicological Information

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#### A. Information on toxicological effects

- **Likely route of exposure**  
EYE CONTACT, SKIN CONTACT, INGESTION
- **Target Organs**  
RESPIRATORY SYSTEM
- **Specific target organ systemic toxicity - single exposure**

THE SUBSTANCE OR MIXTURE IS NOT CLASSIFIED AS SPECIFIC TARGET ORGAN TOXICANT, SINGLE EXPOSURE.

○ **Specific target organ systemic toxicity - repeated exposure**

THE SUBSTANCE OR MIXTURE IS NOT CLASSIFIED AS SPECIFIC TARGET ORGAN TOXICANT, REPEATED EXPOSURE.

○ **Aspiration hazard**

REGARDING THE AVAILABLE DATA THE CLASSIFICATION CRITERIA ARE NOT FULFILLED.

## **B. Carcinogenicity**

○ **IARC**

NO INGREDIENT OF THIS PRODUCT PRESENT AT LEVELS GREATER THAN OR EQUAL TO 0.1% IS IDENTIFIED AS PROBABLE, POSSIBLE OR CONFIRMED HUMAN CARCINOGEN BY *IARC*.

○ **OSHA**

NO INGREDIENT OF THIS PRODUCT PRESENT AT LEVELS GREATER THAN OR EQUAL TO 0.1% IS IDENTIFIED AS A CARCINOGEN OR POTENTIAL CARCINOGEN BY *OSHA*.

○ **NTP**

NO INGREDIENT OF THIS PRODUCT PRESENT AT LEVELS GREATER THAN OR EQUAL TO 0.1% IS IDENTIFIED AS A KNOWN OR ANTICIPATED CARCINOGEN BY *NTP*.

○ **ACGIH**

NO INGREDIENT OF THIS PRODUCT PRESENT AT LEVELS GREATER THAN OR EQUAL TO 0.1% IS IDENTIFIED AS A CARCINOGEN OR POTENTIAL CARCINOGEN BY *ACGIH*.

## **C. Further information**

HAZARDOUS PROPERTIES CANNOT BE EXCLUDED BUT ARE UNLIKELY WHEN THE PRODUCT IS HANDLED APPROPRIATELY.

HANDLE IN ACCORDANCE WITH GOOD INDUSTRIAL HYGIENE AND SAFETY PRACTICE.

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## **Section 12 - Ecological Information & Environmental Information**

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#### **A. Ecotoxicity**

NO INFORMATION AVAILABLE.

#### **B. Persistence and degradability**

NO INFORMATION AVAILABLE.

**C. Bioaccumulative potential**

NO INFORMATION AVAILABLE.

**D. Mobility in soil**

NO INFORMATION AVAILABLE.

**E. Additional ecological information**

NO INFORMATION AVAILABLE.

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**Section 13 - Disposal Considerations****SM****A. Disposal methods**DISPOSE OF CONTENTS/ CONTAINER IN ACCORDANCE WITH THE LOCAL/REGIONAL  
/NATIONAL/INTERNATIONAL REGULATIONS.

DISPOSE OF WASTE PRODUCT IN A PERMITTED INDUSTRIAL WASTE FACILITY.

**B. Uncleaned packaging**

DISPOSAL MUST BE MADE ACCORDING TO OFFICIAL REGULATIONS.

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**Section 14 - Transport Information****SM****A. Land transport (DOT)**

NOT CLASSIFIED AS DANGEROUS IN THE MEANING OF TRANSPORT REGULATIONS.

**B. Air transport (IATA)**

NOT CLASSIFIED AS DANGEROUS IN THE MEANING OF TRANSPORT REGULATIONS.

**C. Sea transport (IMDG)**

NOT CLASSIFIED AS DANGEROUS IN THE MEANING OF TRANSPORT REGULATIONS.

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**Section 15 - Regulatory Information****SM**



**A. National and/or international regulatory information**

- **POPs Management Law**  
NOT APPLICABLE
- **Information of EU Classification**
  - \* **Classification**  
NOT APPLICABLE
  - \* **Risk Phrases**  
NOT APPLICABLE
  - \* **Safety Phrase**  
NOT APPLICABLE
- **U.S. Federal regulations**
  - \* **OSHA PROCESS SAFETY (29 CFR 1910.119)**  
NOT APPLICABLE
  - \* **CERCLA Section 103 (40CFR302.4)**  
NOT APPLICABLE
  - \* **EPCRA Section 302 (40CFR355.30)**  
NOT APPLICABLE
  - \* **EPCRA Section 304 (40CFR355.40)**  
NOT APPLICABLE
  - \* **EPCRA Section 313 (40CFR372.65)**  
*CHROMIUM 7440-47-3 100%*
- **Rotterdam Convention listed ingredients**  
NOT APPLICABLE
- **Stockholm Convention listed ingredients**  
NOT APPLICABLE
- **Montreal Protocol listed ingredients**  
NOT APPLICABLE

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**Section 16 - Other Information****SM**

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**A. Reference**

THE INFORMATION CONTAINED HEREIN IS BELIEVED TO BE ACCURATE. IT IS PROVIDED INDEPENDENTLY OF ANY SALE OF THE PRODUCT FOR PURPOSE OF HAZARD COMMUNICATION. IT IS NOT INTENDED TO CONSTITUTE PERFORMANCE INFORMATION CONCERNING THE PRODUCT. NO EXPRESS WARRANTY, OR IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE IS MADE WITH RESPECT

TO THE PRODUCT OR THE INFORMATION CONTAINED HEREIN.

THIS SAFETY DATA SHEET WAS COMPILED WITH DATA AND INFORMATION FROM THE FOLLOWING SOURCES: *OSHA, NITE, ESIS, NLM, SIDS, IPCS*

**B. Issue date**

- Jan 20, 2017

**C. Revision number and Last date revised**

- Rev. 1 , Jan 20, 2017

**D. Other**

- THIS SDS IS PREPARED ACCORDING TO *THE GLOBALLY HARMONIZED SYSTEM (GHS)*.

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**Description: SM**

**Date of Issue:** Jan 20, 2017

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