

SAFETY DATA SHEET

Date of Issue: May 27, 2016**Technical Review Date:** Jan 20, 2017**Version:** D0002.001

Section 1 - Product and Company Identification

GOLD QUARTZ CRYSTAL SENSOR

A. Product name

- GOLD QUARTZ CRYSTAL SENSOR

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

Section 2 - Hazards Identification, Including Emergency Overview

GOLD QUARTZ CRYSTAL SENSOR**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.

Section 3 - Composition/Information on Ingredients**GOLD QUARTZ CRYSTAL SENSOR****A. Ingredient Name: GOLD QUARTZ CRYSTAL SENSOR**

Name	%	CAS NB	LD(50)/LC(50)
GOLD	<0.0001% BY WEIGHT	7440-57-5	N/A
Intrinsic Crystalline Silicon Dioxide	99.9999% BY WEIGHT	-	N/A

* CAS NUMBER AND EXACT PERCENTAGES ARE BEING WITHHELD AS A TRADE SECRET.

Section 4 - First Aid Measures**GOLD QUARTZ CRYSTAL SENSOR****A. Description of first-aid measures**

- **Inhalation**
AFTER INHALATION: NO INFORMATION AVAILABLE.
- **Skin contact**
AFTER SKIN CONTACT: SENSOR IS BRITTLE AND BREAK EASILY AND THUS SHOULD BE HANDLED WITH TWEEZERS.

IF SENSOR BREAKS USE GLOVES TO PREVENT CUTS.

○ **Eye contact**

AFTER EYE CONTACT: IF SENSOR BREAKS INTO SMALL FRAGMENTS AND PIECES ENTER THE EYES, WASH OUT IMMEDIATELY WITH COPIOUS AMOUNTS OF WATER AND SEEK MEDICAL ATTENTION IMMEDIATELY.

○ **Ingestion**

AFTER SWALLOWING: DO NOT INGEST AS FRAGMENTS COULD BREAK-OFF AND CUT SOFT TISSUE. IF ACCIDENTALLY INGESTED, SEEK MEDICAL ATTENTION IMMEDIATELY.

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

NO INFORMATION AVAILABLE.

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

NO INFORMATION AVAILABLE.

Section 5 - Fire Fighting Measures
GOLD QUARTZ CRYSTAL SENSOR

A. Extinguishing media

○ **Suitable extinguishing media**

USE FIRE EXTINGUISHING METHODS SUITABLE FOR SURROUNDING CONDITIONS.

○ **Unsuitable extinguishing media**

FOR THIS SUBSTANCE/MIXTURE NO LIMITATIONS OF EXTINGUISHING AGENTS ARE GIVEN.

B. Special hazards arising from the substance or mixture

FORMATION OF TOXIC GASES IS POSSIBLE DURING HEATING OR IN CASE OF FIRE.

C. Advice for firefighters

WEAR SELF-CONTAINED BREATHING APPARATUS AND PROTECTIVE SUIT.

DO NOT INHALE EXPLOSION GASES OR COMBUSTION GASES.

WEAR FULLY PROTECTIVE SUIT.

D. Further information

NO INFORMATION AVAILABLE.

Section 6 - Accidental Release Measures
GOLD QUARTZ CRYSTAL SENSOR

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 INFORMATION AVAILABLE.

B. Methods and materials for containment and cleaning up

COLLECT IN AN EMPTY CONTAINER THAT CAN BE SEALED TIGHTLY.

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.

Section 7 - Handling and Storage
GOLD QUARTZ CRYSTAL SENSOR

A. Precautions for safe handling

ENSURE GOOD VENTILATION/EXHAUSTION AT THE WORKPLACE.

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.

Section 8 - Exposure Controls & Personal Protection
GOLD QUARTZ CRYSTAL SENSOR

A. Exposure limits(s)

GOLD 7440-57-5

- **ACGIH**
NO INFORMATION AVAILABLE.
- **NIOSH/GUIDE**
NO INFORMATION AVAILABLE.
- **OSHA_TRANS**
NO INFORMATION AVAILABLE.
- **Z1A**
NO INFORMATION AVAILABLE.
- **OSHA/Z2**
NO INFORMATION AVAILABLE.

Intrinsic Crystalline Silicon Dioxide

- **ACGIH**
NO INFORMATION AVAILABLE.
- **NIOSH/GUIDE**
NO INFORMATION AVAILABLE.
- **OSHA_TRANS**
NO INFORMATION AVAILABLE.
- **Z1A**
NO INFORMATION AVAILABLE.
- **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

GOLD QUARTZ CRYSTAL SENSOR

A. Physical state	SOLID
B. Color	GOLD&WHITE
B. Odor	ODORLESS
C. Odor threshold	NO INFORMATION AVAILABLE.
D. pH	NO INFORMATION AVAILABLE.
E. Melting point/Freezing point	NO INFORMATION AVAILABLE.
F. Initial Boiling Point/Boiling Ranges	NO INFORMATION AVAILABLE.
G. Flash point	NO INFORMATION AVAILABLE.
H. Evaporation rate	NO INFORMATION AVAILABLE.
I. Flammability(solid, gas)	NO INFORMATION AVAILABLE.
J. Upper/Lower Flammability or explosive limits	NO INFORMATION AVAILABLE.
K. Vapor pressure	NO INFORMATION AVAILABLE.
L. Solubility	NO INFORMATION AVAILABLE.
M. Vapor density	NO INFORMATION AVAILABLE.
N. Specific gravity	NO INFORMATION AVAILABLE.
O. Partition coefficient of n-octanol/water	NO INFORMATION AVAILABLE.
P. Autoignition temperature	NO INFORMATION AVAILABLE.
Q. Decomposition temperature	NO INFORMATION AVAILABLE.
R. Viscosity	NO INFORMATION AVAILABLE.
S. Molecular weight	NO INFORMATION AVAILABLE.

Section 10 - Stability & Reactivity Data

GOLD QUARTZ CRYSTAL SENSOR

A. Reactivity

THIS MATERIAL IS CONSIDERED TO BE NON REACTIVE UNDER NORMAL USE CONDITIONS.

B. Chemical stability

STABLE UNDER RECOMMENDED STORAGE CONDITIONS.

C. Conditions to avoid

EXPOSURE TO MOISTURE MAY AFFECT PRODUCT QUALITY.

D. Incompatible materials

STRONG ACIDS

STRONG BASES

HYDROGEN FLUORIDE

OXIDIZING AGENTS

AMMONIA

OXYGEN DIFLUORIDE

CHLORINE

TRIFLUORIDE

E. Hazardous decomposition products

HAZARDOUS POLYMERIZATION WILL NOT OCCUR.

Section 11 - Toxicological Information**GOLD QUARTZ CRYSTAL SENSOR**

A. Information on toxicological effects**o Likely route of exposure**

EYE CONTACT, SKIN CONTACT, INGESTION

o Target Organs

RESPIRATORY SYSTEM

o Specific target organ systemic toxicity - single exposure

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

o Specific target organ systemic toxicity - repeated exposure

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

o Aspiration hazard

REGARDING THE AVAILABLE DATA THE CLASSIFICATION CRITERIA ARE NOT FULFILLED.

B. Carcinogenicity**o 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.

○ **Ingredients**

GOLD 7440-57-5

NO INFORMATION AVAILABLE.

Intrinsic Crystalline Silicon Dioxide

NO INFORMATION AVAILABLE.

Section 12 - Ecological Information & Environmental Information

GOLD QUARTZ CRYSTAL SENSOR

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.

Section 13 - Disposal Considerations**GOLD QUARTZ CRYSTAL SENSOR**

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.

Section 14 - Transport Information**GOLD QUARTZ CRYSTAL SENSOR**

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.

Section 15 - Regulatory Information**GOLD QUARTZ CRYSTAL SENSOR**

A. National and/or international regulatory information**o POPs Management Law**

NOT APPLICABLE

o Information of EU Classification

* Classification

NOT APPLICABLE

* **Risk Phrases**

NOT APPLICABLE

* **Safety Phrase**

NOT APPLICABLE

o **U.S. Federal regulations**

* **OSHA PROCESS SAFETY (29CFR1910.119)**

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)**

NOT APPLICABLE

o **Rotterdam Convention listed ingredients**

NOT APPLICABLE

o **Stockholm Convention listed ingredients**

NOT APPLICABLE

o **Montreal Protocol listed ingredients**

NOT APPLICABLE

Section 16 - Other Information

GOLD QUARTZ CRYSTAL SENSOR

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

- May 27, 2016



C. Revision number and Last date revised

- Rev. 2 , Jan 20, 2017

D. Other

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

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