

SAFETY DATA SHEET

Date of Issue: May 24, 2016**Technical Review Date:** Jan 20, 2017**Version:** D0003.001

Section 1 - Product and Company Identification

HT-100++

A. Product name

- HT-100++

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

HT-100++

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

HT-100++

A. Ingredient Name: HT-100++ (Hydrophobic Tablets)

Name	%	CAS NB	M/W	Symbols
2-Propanol	1-0.5	67-63-0	N/A	-
Tetraethyl orthosilicate	1-0.5	9044-80-8	N/A	
Fused silica	90-95	7631-86-9	60.08 g/mol	-
Fluoropolymer	1-0.5	9014-83-9	N/A	-
(HEPTADEC AFLUORO-1,1, 2,2-TETRAHYDRODECYL) TRIMETHOXYSILANE	1-0.5	83048-65-1	N/A	-

NO COMPONENTS NEED TO BE DISCLOSED ACCORDING TO THE APPLICABLE REGULATIONS.

Section 4 - First Aid Measures

HT-100++

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).

CONSULT DOCTOR IF FEELING UNWELL.

NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON.

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

IRRITANT EFFECTS

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

NO INFORMATION AVAILABLE.

Section 5 - Fire Fighting Measures

HT-100++

A. Extinguishing media

Suitable extinguishing media

USE EXTINGUISHING MEASURES THAT ARE APPROPRIATE TO LOCAL CIRCUMSTANCES AND THE SURROUNDING ENVIRONMENT.

Unsuitable extinguishing media

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

B. Special hazards arising from the substance or mixture

NOT COMBUSTIBLE.

AMBIENT FIRE MAY LIBERATE HAZARDOUS VAPORS.

FIRE MAY CAUSE EVOLUTION OF HYDROGEN FLUORIDE

C. Advice for firefighters

Special protective equipment for fire-fighters

STAY IN DANGER AREA ONLY WITH SELF-CONTAINED BREATHING APPARATUS. PREVENT SKIN CONTACT BY KEEPING A SAFE DISTANCE OR BY WEARING SUITABLE PROTECTIVE CLOTHING.

D. Further information

SUPPRESS (KNOCK DOWN) GASES/VAPORS/MISTS WITH A WATER SPRAY JET. PREVENT FIRE EXTINGUISHING WATER FROM CONTAMINATING SURFACE WATER OR THE GROUND WATER SYSTEM.

Section 6 - Accidental Release Measures**HT-100++**

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

DO NOT LET PRODUCT ENTER DRAINS.

B. Methods and materials for containment and cleaning up

COVER DRAINS. COLLECT, BIND, AND PUMP OFF SPILLS. OBSERVE POSSIBLE MATERIAL RESTRICTIONS (SEE SECTIONS 7 AND 10). TAKE UP DRY. DISPOSE OF PROPERLY. CLEAN UP AFFECTED AREA. 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.

Section 7 - Handling and Storage**HT-100++**

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.

Section 8 - Exposure Controls & Personal Protection**HT-100++**

A. Exposure limits(s)

- **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

A SYSTEM OF LOCAL AND/OR GENERAL EXHAUST IS RECOMMENDED TO KEEP EMPLOYEE EXPOSURES ABOVE THE EXPOSURE LIMITS. LOCAL EXHAUST VENTILATION IS GENERALLY PREFERRED BECAUSE IT CAN CONTROL THE EMISSIONS OF THE CONTAMINANT AT ITS SOURCE, PREVENTING DISPERSION OF IT INTO THE GENERAL WORK AREA. THE USE OF LOCAL EXHAUST VENTILATION IS RECOMMENDED TO CONTROL EMISSIONS NEAR THE SOURCE.

C. Personal protective equipment

- **Respiratory protection**
UNDER CONDITIONS OF FREQUENT USE OR HEAVY EXPOSURE, RESPIRATORY PROTECTION MAY BE NEEDED.
RESPIRATORY PROTECTION IS RANKED IN ORDER FROM MINIMUM TO MAXIMUM.
CONSIDER WARNING PROPERTIES BEFORE USE.
DUST, MIST, FUME-PURIFYING RESPIRATORY PROTECTION.
ANY AIR-PURIFYING RESPIRATOR WITH A CORPUSCLE FILTER OF HIGH EFFICIENCY.
ANY RESPIRATORY PROTECTION WITH A ELECTROMOTION FAN
(FOR DUST, MIST, FUME-PURIFYING)
SELF-CONTAINED BREATHING APPARATUS WITH A CORPUSCLE FILTER OF HIGH EFFICIENCY.
FOR UNKNOWN CONCENTRATION OR IMMEDIATELY DANGEROUS TO LIFE OR HEALTH

ANY SUPPLIED-AIR RESPIRATOR WITH FULL FACEPIECE AND OPERATED IN A PRESSURE -DEMAND OR OTHER POSITIVE-PRESSURE MODE IN COMBINATION WITH A SEPARATE ESCAPE SUPPLY. ANY SELF-CONTAINED BREATHING APPARATUS WITH A FULL FACEPIECE.

○ **Eye/face protection**

WEAR PRIMARY EYE PROTECTION SUCH AS SPLASH RESISTANT SAFETY GOGGLES WITH A SECONDARY PROTECTION FACE SHIELD.

PROVIDE AN EMERGENCY EYE WASH STATION AND QUICK DRENCH SHOWER IN THE IMMEDIATE WORK AREA.

○ **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

HT-100++

A. Physical state	SOLID
B. Color	WHITE
B. Odor	FAINT ODOR
C. Odor threshold	NOT APPLICABLE.
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)	THE PRODUCT IS NOT FLAMMABLE.
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

HT-100++

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

NO INFORMATION AVAILABLE.

E. Hazardous decomposition products

MAY EMIT CO, CO₂, HF, TOXIC GAS OR PARTICLE IF INVOLVED IN FIRE.

Section 11 - Toxicological Information

HT-100++

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

SINCE THE SUBSTANCE IS POORLY ABSORBED, NO HAZARDOUS PROPERTIES ARE TO BE ANTICIPATED. HANDLE IN ACCORDANCE WITH GOOD INDUSTRIAL HYGIENE AND SAFETY PRACTICE.

○ **Ingredients**

NO INFORMATION AVAILABLE.

Section 12 - Ecological Information & Environmental Information

HT-100++

A. Ecotoxicity

○ **Ingredients**

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**HT-100++**

A. Disposal methods

SINCE MORE THAN TWO KINDS OF DESIGNAED WASTE IS MIXED, IT IS DIFFICULT TO TREAT SEPERATLY, THEN CAN BE REDUCTION OR STABILIZATION BY INCINERATION OR SIMILAR PROCESS. IF WATER SEPARATION IS POSSIBLE, PRE-PROCESS WITH WATER SEPARATION PROCESS. DISPOSE BY INCINERATION.

B. Uncleaned packaging

THE USER OF THIS PRODUCT MUST DISPOSAL BY ONESELF OR ENTRUST TO WASTE DISPOSER OR PERSON WHO OTHER'S WASTE RECYCLE AND DISPOSE, PERSON WHO ESTABLISH AND OPERATE WASTE DISPOSAL FACILITIES. DISPOSE OF WASTE IN ACCORD ANCE WITH ALL APPLICABLE LAWS AND REGULATIONS.

Section 14 - Transport Information**HT-100++**

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 InformationHT-100++

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)**
NOT APPLICABLE
- **Rotterdam Convention listed ingredients**
NOT APPLICABLE
- **Stockholm Convention listed ingredients**
NOT APPLICABLE
- **Montreal Protocol listed ingredients**
NOT APPLICABLE

Section 16 - Other InformationHT-100++

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 24, 2016

C. Revision number and Last date revised

- Rev. 3 , Jan 20, 2017

D. Other

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

Description: HT-100++

Date of Issue: May 24, 2016

Technical Review Date: Jan 20, 2017 .