

SAFETY DATA SHEET

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

Section 1 - Product and Company Identification

JW10

A. Product name

- JW10

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**JW10**

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**JW10**

A. Ingredient Name: JW10○ **Hazardous ingredients**

Perfluoropolyether solution

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

Section 4 - First Aid Measures**JW10**

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

AFTER INHALATION: REMOVE TO FRESH AIR. IF NOT BREATHING OR DIFFICULT, GIVE ARTIFICIAL RESPIRATION OR OXYGEN.

○ **Skin contact**

AFTER SKIN CONTACT: REMOVE PRODUCT FROM SKIN WITH DRY CLOTH OR TOWEL,
AND WASH EXPOSED AREA WITH DETERGENT.

○ **Eye contact**

AFTER EYE CONTACT: IMMEDIATELY FLUSH WITH PLENTY OF WATER FOR AT LEAST
15 MINUTES AND PROMPTLY CALL A PHYSICIAN.

○ **Ingestion**

AFTER SWALLOWING: WASH OUT MOUTH WITH WATER PROVIDED PERSON IS
CONSCIOUS. NEVER GIVE ANYTHING BY MOUTH TO AN
UNCONSCIOUS PERSON. CALL A PHYSICIAN 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

JW10

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

JW10

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 ALLOW PRODUCT TO REACH SEWAGE SYSTEM OR ANY WATER COURSE.

B. Methods and materials for containment and cleaning up

FOR A SMALL AMOUNT OF LEAKAGE: ABSORB WITH LIQUID-BINDING MATERIAL (SAND, DIATOMITE, ACID BINDERS, UNIVERSAL BINDERS) OR 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

JW10

A. Precautions for safe handling

ENSURE GOOD VENTILATION/EXHAUSTION AT THE WORKPLACE.

PREVENT FORMATION OF AEROSOLS.

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

JW10

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

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**JW10**

A. Physical state

LIQUID

B. Color

COLORLESS

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	76C
G. Flash point	NO FLASH POINT
H. Evaporation rate	NO INFORMATION AVAILABLE.
I. Flammability(solid, gas)	NOT FLAMMABLE
J. Upper/Lower Flammability or explosive limits	NO INFORMATION AVAILABLE.
K. Vapor pressure	NO INFORMATION AVAILABLE.
L. Solubility	NOT MISCIBLE OR DIFFICULT TO MIX.
M. Vapor density	9.1
N. Specific gravity	1.5 [REF STD: WATER=1]
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

JW10

A. Reactivity

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

B. Chemical stability

THIS MATERIAL IS STABLE UNDER RECOMMENDED STORAGE AND HANDLING CONDITIONS.

C. Conditions to avoid

NO INFORMATION AVAILABLE.

D. Incompatible materials

STRONG ACIDS

STRONG BASES

STRONG OXIDIZING AGENTS

E. Hazardous decomposition products

HAZARDOUS POLYMERIZATION WILL NOT OCCUR.

Section 11 - Toxicological Information**JW10**

A. Information on toxicological effects○ **Acute toxicity**

LD/LC50 VALUES RELEVANT FOR CLASSIFICATION:

*** Perfluoropolyether solution**

Oral LD50 >2000 mg/kg (Rat)

PRIMARY IRRITANT EFFECT

SKIN CORROSION/IRRITATION

*** Perfluoropolyether solution**

IRRITATION OF SKIN PRIMARY SKIN IRRITATION STUDY (RABBIT) : SLIGHTLY IRRITANT
BASED ON AVAILABLE DATA, THE CLASSIFICATION CRITERIA ARE NOT MET.

After inhalation NO FURTHER INFORMATION AVAILABLE.

RESPIRATORY OR SKIN SENSITISATION.

NO SENSITISING EFFECTS KNOWN.

BASED ON AVAILABLE DATA, THE CLASSIFICATION CRITERIA ARE NOT MET.

CMR effects

Germ cell mutagenicity BASED ON AVAILABLE DATA, THE CLASSIFICATION CRITERIA ARE
NOT MET.

Carcinogenicity BASED ON AVAILABLE DATA, THE CLASSIFICATION CRITERIA ARE NOT MET.

Reproductive TOXICITY BASED ON AVAILABLE DATA, THE CLASSIFICATION CRITERIA ARE
NOT MET.

STOT-SINGLE EXPOSURE BASED ON AVAILABLE DATA, THE CLASSIFICATION CRITERIA ARE
NOT MET.

STOT-REPEATED EXPOSURE BASED ON AVAILABLE DATA, THE CLASSIFICATION CRITERIA
ARE NOT MET.

Aspiration hazard BASED ON AVAILABLE DATA, THE CLASSIFICATION CRITERIA ARE NOT
MET.

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.

○ **Ingredients**

Perfluoropolyether solution

NO INFORMATION AVAILABLE.

Section 12 - Ecological Information & Environmental Information

JW10

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

DISCHARGE INTO THE ENVIRONMENT MUST BE AVOIDED.

Section 13 - Disposal Considerations

JW10

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

JW10

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

JW10

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

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

JW10

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)*.

Description: JW10

Date of Issue: Jan 20, 2017

Technical Review Date: Jan 20, 2017 .