1. Chemical product and company identification

Product name  
FUJI DRI-CHEM CONTROL QN

Product usage  
FUJI DRI-CHEM: Accuracy Control for ammonia

Company Name  
FUJIFILM Corporation

Address  
2-26-30, Nishiazabu, Minato-ku, Tokyo, 106-8620

Division  
Medical Systems Business Div.

Telephone Number  
03-6418-2199

FAX Number  
03-6418-9350

Emergency Contacts  
Japan Poison Information Center (In case of accidental poisoning call either)

Telephone Number  
Poison Help Emergency Call: Osaka 072-727-2499(24hrs) Tsukuba 029-852-9999(9a.m-9p.m.)

Reference number  
DC100101G

2. Hazards identification

GHS-classification

Health hazards

Acute toxicity (Oral)  
Not classified

Skin corrosion/irritation  
Not classified

Serious eye damage/eye irritation  
Not classified

*Degree of Hazards: Smaller category number is more hazardous.

No hazards resulting from the material as supplied.

National/local information  
See Section 15. REGULATORY INFORMATION

3. Composition/information on ingredients

Substance or Mixture  
Mixture

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS #</th>
<th>Gazette notification</th>
</tr>
</thead>
<tbody>
<tr>
<td>water</td>
<td>7732-18-5</td>
<td>------</td>
</tr>
<tr>
<td>hydrogen chloride anhydrous</td>
<td>7647-01-0</td>
<td>1-215 (1)-215</td>
</tr>
</tbody>
</table>

Concentration (%)  
80 - 100  
0 - 0.1

Chemical formula  
H2O (7732-18-5), HCl (7647-01-0)

(*) Generally chemical substances greater than 1% of the total are listed.

Note: The notes / remarks within the brackets [ ] following the chemical substance names are used to communicate the following indications:

"PRTR S1" : Chemical substances that are designated in the Law for Promoting the Management of Chemical Substances as Specific Class 1 Chemical Substances.

"PRTR 1" : Chemical substances that are designated as Class 1 Chemical substances in the same Law.

"PRTR 2" : Chemical substances that are designated as Class 2 Chemical substances in the same Law.

"SSN" : Chemical substances that are subject to notification in accordance with the Labor Safety and Health Law.

4. First aid measures

In case of inhalation  
Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician.

Skin contact  
Rinse skin with water/shower. Get medical attention if irritation develops and persists. For minor skin contact, avoid spreading material on unaffected skin.

Eye contact  
Rinse with water. Get medical attention if irritation develops and persists.

Ingestion  
Rinse mouth thoroughly. Get medical attention if any discomfort occurs.

Protection of first-aid responders  
Rescuers should wear proper personal protective equipment suitable for situation.

5. Fire-fighting measures

Extinguishing media  
Dry chemical, foam, carbon dioxide, water fog.

Extinguishing media to avoid  
None.
Special fire fighting procedures
Keep personnel removed from and upwind of fire. Water runoff can damage the environment. Dike and collect water used to fight fire. Evacuate area and fight fire from a safe distance.

Protection of fire-fighters
Wear adequate personal protective equipment.

6. Accidental release measures

Personal precautions, protective equipment and emergency measures
Wear adequate personal protective equipment, see Section 8 (Exposure Controls/Personal Protection)

Environmental precautions
Prevent from entering into soil, waterways and ground water.

Clean-up methods and materials and containment measures
Spills should be contained by, and covered with suitable absorbent material and removed for disposal.

7. Handling and storage

Handling
Technical measures
Avoid contact with skin, eyes and clothing. Wash hands after handling.

Local and general ventilation
Use only with adequate ventilation.

Precautions
Use care in handling/storage.

Safe handling advice
Wash hands thoroughly after handling.

Storage
Suitable storage conditions
Protect from sunlight. Keep container tightly closed.

Safe packaging materials
Use glass container.

8. Exposure controls/personal protection

Occupational exposure limits

Japan OELs - JSOH

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>hydrogen chloride anhydrous (7647-01-0)</td>
<td>Ceiling</td>
<td>5 ppm 7.5 mg/m³</td>
</tr>
</tbody>
</table>

ACGIH

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>hydrogen chloride anhydrous (7647-01-0)</td>
<td>Ceiling</td>
<td>2 ppm</td>
</tr>
</tbody>
</table>

Engineering measures
Evacuate and ventilate spill area. Provide easy access to water supply and eye wash facilities.

Personal protective equipment
Respiratory protection
Wear suitable respiratory protection.

Hand protection
Wear suitable gloves.

Eye protection
Use eye protection. Use face shield in case of splash risk.

Skin and body protection
Wear suitable protective clothing.

Hygiene measures
Handle in accordance with good industrial hygiene and safety practice.

9. Physical and chemical properties

Appearance
Form
Clear liquid
Color
Transparent colourless
Odor
Practically odourless

pH
3 Approx.
Melting point/Freezing point
No data available.
Boiling point, initial boiling point, and boiling range
No data available.
Flash point
No data available.
Auto-ignition temperature
No data available.
Flammability limit - lower (%)
No data available.
10. Stability and reactivity

Stability
Stable at normal conditions.

Possibility of hazardous reactions
None.

Conditions to avoid
Freezing. Protect against direct sunlight.

Incompatible materials
None.

Hazardous decomposition products
CO, CO2

11. Toxicological information

Test Results
Acute Oral LD50 Rat: > 2000 mg/kg

Skin corrosion/irritation
No irritation

Serious eye damage/eye irritation
Non irritant

12. Ecological information

Bioaccumulation
Not established.

Mobility in soil
Not established.

Other hazardous effects
Not established

13. Disposal considerations

When your own wastewater treatment plant is not available, collect entire waste and then charge to a licensed industrial waste management professional with manifests for industrial waste. Laws and regulations to be followed while disposing of this product or waste: Japanese Waste Control and Public Cleaning Law: Falls under the category of an industrial waste (acidic waste) Japanese Water Pollution Control Law: Living environment-related item Japanese Sewer Management Law: Restricts discharging wastewater.

14. Transport information

Marine transportation is regulated by IMDG Code. Air transportation is regulated by IATA Dangerous Goods Regulations.

--------- Information for marine and air transportation to be passed to the shipping company ---------

IMDG
Not regulated as dangerous goods.

IATA
Not regulated as dangerous goods.

15. Regulatory information

Law concerning the Examination and Regulation of Manufacture etc. of Chemical Substances

Class 1 Specified Chemical Substance: Not regulated.
Class 2 Specified Chemical Substance: Not regulated.
Type 1 Monitoring Chemical Substance: Not regulated.
Type 2 Monitoring Chemical Substance: Not regulated.
Type 3 Monitoring Chemical Substance: Not regulated.

Industrial Safety and Health Law

Dangerous Substances Flammable: Not regulated.
Dangerous Substances Flammable Gases: Not regulated.
Dangerous Substances Oxidizing: Not regulated.
Dangerous Substances Explosives: Not regulated.
Dangerous Substances Ignitable: Not regulated.
Harmful Substances Carcinogen: Not regulated.
Class 1 Designated Chemical Substances: Not regulated.
Class 2 Designated Chemical Substances: Not regulated.
Class 3 Designated Chemical Substances: Not regulated.
Class 1 Organic Solvents Preparations: Not regulated.
Class 2 Organic Solvents Preparations: Not regulated.
Class 3 Organic Solvents Preparations: Not regulated.
Notifiable Substance: Not regulated.
Labeling Requirements: Not regulated.
Others: Not regulated.

Poisonous and Deleterious Substances Control Law
Specified Poisonous Substance - Main Law: Not regulated.
Specified Poisonous Substance - Cabinet Order: Not regulated.
Poisonous Substances - Cabinet Order: Not regulated.
Deleterious Substances - Main Law: N/A.
Deleterious Substances - Cabinet Order: Not regulated.
Enforcement Order Article 32-2: Not regulated.
Enforcement Order Article 32-3: Not regulated.
Not Considered Poisonous: Not regulated.
Not Considered Deleterious: Not regulated.
Cabinet Order, Preparations:

Fire Service Law
Class 1 Oxidizing Solids: Not regulated.
Class 2 Flammable Solids: Not regulated.
Class 3 Spontaneous combustibility and Water-reactivity Substances: Not regulated.
Class 4 Flammable Liquids: Not regulated.
Class 5 Self-Reactive Substances: Not regulated.
Class 6 Oxidizing Liquids: Not regulated.
Designated Flammable Substances: Not regulated.
Storage Reporting Substance: Not regulated.

Japan PRTR
Specific Class 1 Designated Substance: Not regulated.
Class 1 Designated Substance: Not regulated.
Class 2 Designated Substance: Not regulated.

Ship Safety Law

Civil Aeronautics law

Japan Marine Pollution

Prevention Law

High Pressure Gas Safety law

Gun Powder Control Law

16. Other information
This information is provided without warranty. The information is believed to be correct. This information should be used to make an independent determination of the methods to safeguard workers and the environment. This MSDS is prepared according to the MSDS guideline of Japan Chemical Industry Association based on JIS Z7250:2005.