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  Osaka 072-727-2499(24hrs)
                                Tsukuba 029-852-9999(9a.m-9p.m.)
Reference number  DC100103G

2. Hazards identification

GHS classification

- 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.
*Hazards not stated here are "Not applicable" or "Classification not possible".

National/local information  See Section 15. REGULATORY INFORMATION

3. Composition/information on ingredients

Substance or mixture  Mixtures

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS #</th>
<th>ENCS no.</th>
<th>ISHL no.</th>
<th>Concentration (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>water</td>
<td>7732-18-5</td>
<td>------</td>
<td></td>
<td>80 - 100</td>
</tr>
<tr>
<td>hydrogen chloride anhydrous</td>
<td>7647-01-0</td>
<td>1-215</td>
<td>(1)-215</td>
<td>0 - 0.1</td>
</tr>
</tbody>
</table>

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

If inhaled  Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician.
If on skin  Rinse skin with water/shower. Get medical attention if irritation develops and persists. For minor skin contact, avoid spreading material on unaffected skin.
If in eyes  Rinse with water. Get medical attention if irritation develops and persists.
If swallowed  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

See Section 8 (Exposure Controls/Personal Protection).

Safe handling advice

See Section 10 (Stability and reactivity).

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. (Japan Society of Occupational Health: Advisory Opinion on Permissible [Exposure] Limits)

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>hydrogen chloride anhydrous (CAS 7647-01-0)</td>
<td>TWA</td>
<td>3 mg/m3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2 ppm</td>
</tr>
</tbody>
</table>

US. ACGIH Threshold Limit Values

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>hydrogen chloride anhydrous (CAS 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.

Flammability limit - upper (%)

No data available.

Vapor pressure

No data available.
Vapor density: No data available.
Specific gravity: No data available.
Density: No data available.
Solubility (water): No data available.
Partition coefficient (n-octanol/water): Not available
Decomposition temperature: 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
<table>
<thead>
<tr>
<th>Product</th>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>FUJI DRI-CHEM CONTROL QN</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acute</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oral</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LD50</td>
<td>Rat</td>
<td>&gt; 2000 mg/kg</td>
</tr>
<tr>
<td>Skin corrosion/irritation</td>
<td></td>
<td>No irritation</td>
</tr>
<tr>
<td>Serious eye damage/eye irritation</td>
<td></td>
<td>non irritant</td>
</tr>
</tbody>
</table>

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: Effluent standard Japanese Sewer Management Law: Restricts discharging sewer.

14. Transport information
Marine transportation is regulated by IMDG Code. Air transportation is regulated by IATA Dangerous Goods Regulations.
International regulations
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.
Monitoring Chemical Substances: Not regulated.
Priority Assessment Chemicals: 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.

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
Not regulated.

Civil Aeronautics law
Not regulated.

Japan Marine Pollution Prevention Law
Not regulated.

High Pressure Gas Safety law
Not regulated.

Gun Powder Control Law
Not regulated.

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.