Material Safety Data Sheet (MSDS)

H100 & H100d Hydrophilic coating

Document date July 28, 2016

SECTION 1: Identification of the substance/mixture and of the company

1.1 Product identifier

Product name: H100 & H100d Hydrophilic coating
Product use: Coating to make surfaces hydrophilic

Description: A liquid solution that when applied to a surface leaves a coating that makes most materials hydrophilic.

The product is for professional use only

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses: Coating of surfaces to make them hydrophilic
Uses advised against: Coating of surfaces in constant contact with rain or condensing conditions.

1.3 Details of the supplier of the safety data sheet

Manufacturers name: Jonsman Innovation ApS
Hovedvejen 1d
3330 Gørløse
Denmark
Phone: (+45) 40624345
E-mail: info@joninn.com
Web: www.joninn.com
1.4 Emergency telephone number
Managers telephone number: (+45) 40624345

SECTION 2: Hazards identification

This product is not considered to be hazardous.

2.1 Classification of the substance or mixture
Product definition: Mixture
Physical/chemical hazards: None.
Adverse human health effects: Not expected.
Environmental hazard: Not expected

2.2 Label elements
Hazard symbol or symbols: None
Indication of danger: None
Risk phrases: None
Safety phrases: S2-Keep out of reach of children
S7-Keep container tightly closed
S26-In case of contact with eyes, rinse with plenty of water.

2.3 Other hazards
Other hazards which do not result in classification: Not applicable
SECTION 3: Composition/information on ingredients

3.2 Mixtures
A mixture of water and 1% non-hazardous solids.

There are no ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

SECTION 4: First aid measures

4.1 Description of first aid measures

Eye contact: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 15 minutes. Get medical attention if adverse health effects persist or are severe.

Inhalation: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Skin contact: Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Ingestion: Wash out mouth with water.

4.2 Most important symptoms and effects, both acute and delayed

Potential acute health effects:
- Inhalation: No known significant effects or critical hazards.
- Ingestion: No known significant effects or critical hazards.
- Skin contact: No known significant effects or critical hazards.
- Eye contact: No known significant effects or critical hazards.

Over-exposure signs/symptoms

Inhalation of fumes: No known significant effects or critical hazards.

Eye contact: Rare adverse symptoms may be irritation.
Skin contact: No known significant effects or critical hazards.
Ingestion: No known significant effects or critical hazards.
4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician: Treat symptomatically. Contact a poison treatment specialist immediately if large quantities have been ingested or inhaled.

Specific treatments: No specific treatment

SECTION 5: Firefighting measures

H100 is 99% water and thus cannot burn and will extinguish a fire like pure water.

5.1. Extinguishing media

Unsuitable extinguishing media
In the presence of H100 any water compatible extinguishing media can be used.

5.2. Special hazards arising from the substance or mixture

Hazardous combustion products
If the water in the H100 solution is completely evaporated, the remaining 1% will burn and form Carbon dioxide (CO$_2$).

Unusual Fire & Explosion Hazards
No data available.

Specific hazards
No data available.

5.3. Advice for firefighters

Special Fire Fighting Procedures
No special procedures needed.

Protective equipment for fire-fighters
No special equipment needed.
SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Avoid ingestion and inhalation and contact with skin and eyes. Restrict access to the area until the spillage is treated.
H100 is quite safe and the worst risk is drowning in it.

6.2. Environmental precautions

Avoid unauthorized discharge to the environment. Do not discharge into drains, water courses or onto the ground. Clean up any spillages immediately and prevent material from spreading and entering drains or sewage systems.

6.3. Methods and material for containment and cleaning up

Small Spillages: Absorb with inert material. Large Spillages: Dam and absorb spillages with sand, earth or other inert material. Fit drain covers where they are available if the spillage is likely to enter the drainage system. Collect spillage in containers, seal securely and deliver for disposal according to local regulations. Containers with collected spillage must be properly labelled with correct contents. Wash spillage site well with water and detergent, be aware of the potential for surfaces to become slippery. Wash thoroughly after dealing with a spillage.

6.4. Reference to other sections
Refer to sections 8 and 13 for additional information
SECTION 7: Handling and storage

7.1. Precautions for safe handling

Avoid spilling, skin and eye contact. Avoid inhalation of vapors and spray mists. Do not mix with incompatible substances or mixtures. Do not eat, drink or smoke when handling. Do not dispose of the substance to the environment through unauthorized means. Do not discharge to land or water including the drainage system. Ensure emergency procedures are in place to treat spillages.

7.2. Conditions for safe storage, including any incompatibilities

Store in closed original container at temperatures between 4°C and 30°C. Store away from heat, direct sunlight. Store away from incompatible materials. Store in a stable situation to avoid spillages. It is advisable to store in a bunded area or use other protective measures such as a sump pallet or storage tray. If the substance is transferred to other containers ensure the packaging material is compatible. Consult with the packaging manufacturer or supplier. Do not leave storage containers exposed to the atmosphere as this will result in evaporation of contents.

7.3. Specific end use(s)

The identified uses for this product are detailed in Section 1.2.

SECTION 8: Exposure control/personal protection

8.1. Control parameters

No data available.

8.2. Exposure controls

Engineering measures
Provide adequate ventilation in cases where the water in the H100 will evaporate due to high use temperature.

Respiratory equipment
No respiratory equipment needed.

Hand protection
Wear protective gloves.

Eye protection
Wear approved chemical safety goggles.
Hygiene measures
Remove clothing when contamination will result in exposure to the substance, segregate and wash before re-use. Do not eat, drink or smoke in the work area. Wash hands at the end of each work shift and before eating, smoking and using the toilet. Remove contaminated clothing when entering eating areas or other places that could lead to contamination of others with the product.

SECTION 9: Physical and chemical properties

Appearance: Clear, pale yellow liquid.
Specific Gravity: 1.0 g/ml
Volatile by volume @ 21°C: 99%
Boiling Point: 100°C

SECTION 10: Stability and reactivity

Stability:
Stable under ordinary conditions of use and storage. Heat and sunlight can contribute to instability.

Hazardous Decomposition Products:
Carbon dioxide and carbon monoxide may form when all water in evaporated and the remaining solids are heated to decomposition.

Hazardous Polymerization:
Will not occur.

Incompatibilities:
Strong oxidizers, acids, chlorine, hydrogen peroxide.

Conditions to Avoid:
Heat, flames, UV radiation and incompatibles.

SECTION 11: Toxicological information

Acute toxicity
Oral : LD50 (rat) : > 100 g/kg
Dermal : LD50 (rat) : No data available.
Inhalation : LC50 (rat) : No data available.
Dermal irritation (rabbit) : Not irritant.
Eyes irritation (rabbit) : Not irritant.
Sensitization: This material was found to be non-sensitising in guinea pigs.
Mutagenicity: Non-mutagenic.
Teratogenicity: Not teratogenic
Carcinogenicity: Not carcinogenic

SECTION 12: Ecological information

Environmental Fate:
When released into the soil;
99% of this material is expected to quickly evaporate.
1% of this material will biodegrade fully.

When released to water;
99% of this material is water so this is fully compatible.
1% of this material will biodegrade fully.

When released into the air;
99% of this material is water so this will evaporate into the air.
1% of this material is insoluble in air and will thus condense on solid surfaces.

Environmental Toxicity:
This material is fully biocompatible and will not harm land or aquatic life.
This material is not expected to significantly bioaccumulate.

SECTION 13: Disposal considerations

Whatever cannot be saved for recovery or recycling should be handled as hazardous waste and sent to an approved incinerator or disposed in an approved waste facility. Processing, use or contamination of this product may change the waste management options. Local disposal regulations may differ from what is described in this document, always follow local law and regulations. Dispose of container and unused contents in accordance with local requirements.

SECTION 14: Transport information

IATA:
Proper shipping name: Water solution

SECTION 15: Regulatory information
Not regulated.

**SECTION 16: Other information**

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