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## Safety Data Sheet

### 1. Identification of the substance/mixture and of the company/undertaking

#### 1.1. Product identifier

ADDITIVE, ZCH-100D

ADDITIVE, ZCH-250D

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

Coolant

#### 1.3. Details of the supplier of the safety data sheet

Manufacturer: Roland DG Corporation

Address: 1-6-4 Shinmiyakoda, Kita-ku, Hamamatsu-shi,  
Shizuoka-ken, 431-2103  
JAPAN

Phone: + 81-53-484-1224

Fax: + 81-53-484-1226

Supplier: DGSHAPE Corporation

Address: 1-6-4 Shinmiyakoda, Kita-ku, Hamamatsu-shi,  
Shizuoka-ken, 431-2103  
JAPAN

Phone: + 81-53-482-7069

Fax: + 81-53-424-6059

E-mail Address:

Revised date: 17 October, 2019

#### 1.4. Emergency telephone:

### 2. Hazard identification

#### 2.1. Classification of the substance or mixture

This product is not classified as hazardous according to GHS criteria.

#### 2.2. GHS label elements, including precautionary statements

The product does not need to be labelled in accordance with GHS criteria.

#### 2.3. Other hazards

##### Potential Health Effects:

Eyes: Contact with eye may be mildly irritating.

Skin: Contact with skin may cause irritation, swelling or redness, allergic

Inhalation: Exposure to vapors (mist) will cause respiratory irritation and anesthesia.

Ingestion: May cause upset stomach.

Chronic Health Hazards: Repeated skin contact may cause a persistent irritation or dermatitis.

Carcinogenicity: None of the ingredients in this product is listed by IARC as a carcinogen.  
(1,2A and 2B)

### 3. Composition/information on ingredients

**Chemical nature:** mixture

| Composition     | CAS No. | EC No. | EU registration No.   | % By Weight | Classification<br>EC No. 1272/2008 |
|-----------------|---------|--------|-----------------------|-------------|------------------------------------|
| Chelating agent | C.B.I.  | C.B.I. | N/A<br>for the moment | 40-60       | Not classified as hazardous        |
| Water           | -       | -      | Exemption             | 40-60       | Not classified as hazardous        |

\*C.B.I.: Confidential Business Information

### 4. First aid measures

#### 4.1. Description of first aid measures

- Eyes:** In case of contact, immediately flush eyes with plenty of water for several minutes. Hold eyelids open during flushing. Call a physician.
- Skin:** In case of contact, immediately flush with plenty of water while removing contaminated clothing and shoes. Wash contaminated clothing before reuse. If swelling or redness occurs, call a physician.
- Inhalation:** If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician.
- Ingestion:** If swallowed, DO NOT induce vomiting. Seek immediate medical advice.

#### 4.2. Most important symptoms and effects, both acute and delayed

- Eyes:** Contact with eye may be mildly irritating.
- Skin:** Contact with skin may cause irritation, swelling or redness, allergic sensitization.
- Inhalation:** Exposure to vapors (mist) will cause respiratory irritation and anesthesia.
- Ingestion:** May cause upset stomach.

#### 4.3. Indication of any immediate medical attention and special treatment needed

No information

### 5. Firefighting measures

Suitable extinguishing media:

Dry chemical, Foam, Carbon dioxide, Dry sand, Loaded stream in spray.

Unsuitable extinguishing media:

Water, High-pressure water jet

#### 5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products: Carbon monoxide, carbon dioxide, oxides of nitrogen, toxic gases/vapors.

#### 5.3. Advice for firefighters

Wear special chemical protective clothing and positive pressure self-contained breathing apparatus(SCBA).

Approach fire from upwind to avoid hazardous vapors and toxic decomposition products. Decontaminate or discard any clothing that may contain chemical residues. Applying direct water may be dangerous because fire may expand to surroundings.



|                                 |   |
|---------------------------------|---|
| Hygiene measures:               | Wash hands after handling. In case contact with clothing, wash before reuse.<br>Do not eat, drink or smoke in handling or storage area. |
| Environmental exposure control: | Avoid release to the environment.   |

## 9. Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

|   |                           |
|---|---------------------------|
| Appearance:                                   | Clear liquid              |
| Odour:  | Slightly                  |
| Odour threshold;                              | No data available         |
| pH:   | 10-11                     |
| Melting point/freezing point;                 | ≤ -20°C                   |
| Initial boiling point and boiling range;      | No data available         |
| Flash point:                                  | Not flammable             |
| Evaporation rate:                             | No data available         |
| Flammability(solid,gas):                      | Not applicable            |
| Upper/lower flammability or explosive limits; | No data available         |
| Vapor pressure:                               | No data available         |
| Vapor density:                                | No data available         |
| Relative density:                             | 1.4-1.6g/mL(20°C)         |
| Solubility:                                   | No data available         |
| Solubility(ies);                              | Water solubility: Soluble |
| Partition coefficient: n-octanol/water:       | No data available         |
| Auto-ignition temperature;                    | No data available         |
| Decomposition temperature;                    | No data available         |
| Viscosity:                                    | No data available         |
| Explosive properties:                         | No data available         |
| Oxidizing properties:                         | No data available         |
| Volatile organic compounds (VOC) content:     | No data available         |

### 9.2. Other information: No information

## 10. Stability and reactivity

|   |  |
|---|--|
| 10.1. Reactivity:                         | No reactivity under normal temperature.                                      |
| 10.2. Chemical stability:                 | Stable under normal temperature  |
| 10.3. Possibility of hazardous reactions: | Not expected   |
| 10.4. Conditions to avoid:                | Elevated temperatures/heat, UV light, when not in use.                       |
| 10.5. Incompatible materials:             | Avoid contact with acids, amines, free radical initiators, oxidizing agents. |
| 10.6. Hazardous decomposition products:   | Carbon monoxide, carbon dioxide, oxides of nitrogen, toxic                   |

## 11. Toxicological information

### 11.1. Information on toxicological effects

|                                    |   |
|------------------------------------|---|
| Routes Of Overexposure:            | Eye, skin, inhalation, and oral   |
| Acute toxicity:                    |   |
|                                    | Oral LD50 ≥ 5000mg/kg (rat, OECD423)  |
|                                    | Dermal LD50 No data available   |
|                                    | Inhalant LC50 No data available   |
| Skin corrosion/irritation:         | No data available   |
| Serious eye damage/eye irritation: | No data available   |
| Respiratory or skin sensitisation: | No data available   |
| Germ cell mutagenicity:            | No data available   |
| Reproductive toxicity:             | No data available   |
| Carcinogenicity:                   | None of the ingredients in this product is listed by IARC as a carcinogen.<br>(1,2A and 2B) |

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|                         |                   |
|-------------------------|-------------------|
| STOT-single exposure:   | No data available |
| STOT-repeated exposure: | No data available |
| Aspiration hazard:      | No data available |

**12. Ecological information**

|   |  |
|---|--|
| 12.1. Toxicity:                           | No data available                            |
| 12.2. Persistence and degradability:      | No data available                            |
| 12.3. Bioaccumulative potential:          | No data available                            |
| 12.4. Mobility in soil:                   | No data available                            |
| 12.5. Results of PBT and vPvB assessment: | Has not carried out PBT and vPvB assessment. |
| 12.6. Other adverse effects:              | No data available                            |

**13. Disposal considerations**

- 13.1. Waste treatment methods:  
Treatment, storage, transportation, and disposal must be in accordance with applicable Federal, State/Provincial and Local regulations. Do not flush to surface water or sanitary sewer system.

**14. Transport information**

- |   |   |
|---|---|
| 14.1. UN Class/UN Number:<br>ADR/ADG/DOT, IMDG, or IATA :                   | Not regulated   |
| 14.2. UN proper shipping name:<br>ADR/ADG/DOT, IMDG, or IATA :              | Not regulated   |
| 14.3. Transport hazard class(es):<br>ADR/ADG/DOT, IMDG, or IATA :           | Not regulated   |
| 14.4. Packing group:<br>ADR/ADG/DOT, IMDG, or IATA :                        | Not regulated   |
| 14.5. Environmental hazards:<br>ADR/ADG/DOT, IMDG, or IATA :                | Not regulated   |
| 14.6. Special precautions for user:   | Transport and storage of the product in accordance with general precautions and instructions mentioned in this SDS. |
| 14.7. Transport in bulk according to Annex II of MARPOL 73/78 and IBC code: | Not regulated   |

**15. Regulatory information**

EU Information:  
Chemical Safety Assessment according to (EC)No. 1907/2006:  
This product has not carried out any Chemical Safety Assessment yet.

Australia Information:  
Hazardous statement: Not classified as hazardous according to NOHSC criteria.

International Information:  
None of the ingredients in this product is listed by IARC as a carcinogen. (1,2A and 2B)

**16. Other information**

List of relevant H-Statements in section 3: Nothing

The information in this Safety Data Sheet (SDS) is believed to be correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text. It is subject to revision as additional knowledge and experience is gained. Roland DG does not warrant the completeness or accuracy of the information contained herein.