
Safety Data Sheet

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

1.1. Product identifier

ADDITIVE, ZAW-1000D

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: 10 May, 2018

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 EC No. 1272/2008
Glycerols	C.B.I.	C.B.I.	N/A for the moment	45-55	Not classified as hazardous
Water	-	-	Exemption	45-55	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.
 Not Flammable, Flash Point: >100 °C

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.

Eye protection:	When handling the resin, wear safety glasses or chemical splash goggles.
Skin protection:	When handling the resin, wear protective clothing.
Hygiene measures:	Wash hands after handling. In case contact with clothing, wash before reuse. 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:	No data available
Melting point/freezing point;	No data available
Initial boiling point and boiling range;	No data available
Flash point:	>100 °C
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:	No data available
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:	Polymerize under heat and/or light.
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
10.6. Hazardous decomposition products:	Carbon monoxide, carbon dioxide, oxides of nitrogen, toxic gases/vapors.

11. Toxicological information

11.1. Information on toxicological effects

Routes Of Overexposure:	Eye, skin, inhalation, and oral	
Acute toxicity:	Oral LD50	No data available
	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. (1,2A and 2B)
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:	No data available
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: ADR/ADG/DOT, IMDG, or IATA :	Not regulated
14.2. UN proper shipping name: ADR/ADG/DOT, IMDG, or IATA :	Not regulated
14.3. Transport hazard class(es): ADR/ADG/DOT, IMDG, or IATA :	Not regulated
14.4. Packing group: ADR/ADG/DOT, IMDG, or IATA :	Not regulated
14.5. Environmental hazards: 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.