

Safety Data Sheet

In accordance with Directive 2001/58/EC

No. J-2230EU-10

Identity (As used on Label and List)

Revised Date: November 28, 2003

Prepared Date: July 23, 2001

Aqua-Guard KG-50

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

1.1 Identification of the substance or preparation

Trade name: Aqua Guard KG-500

Chemical Name: Fluoroacrylate copolymer emulsion

1.2 Use of the substance/preparation

Water and oil repellent

1.3 Company/undertaking identification

Supplier's Name: Reco K.K.

Address: Nishinomiya-shi, Kuraken 2-18-35; 662-0082 Japan

Telephone: +81-90-7490-9400

2. COMPOSITION/INFORMATION ON INGREDIENTS

CAS, r-No	EC-No	Name	% of weight	Classification
Trade Secret	N/A (Please refer to section 15)	pefluoroalkylethylacrylate copolymer	Trade Secret	not classified
Trade Secret	N/A (Please refer to section 15)	emulsifier	Trade Secret	not classified
25265-71-8	246-770-3	Dipropyleneglycol	8	not classified
		water	72	

3. HAZARDS IDENTIFICATION

Application of the classification rules in Directives 67/548/EEC: not classified

Emergency overview

Inhaling fumes or mists may irritate the respiratory organs. (Cough, discomfort, labored breathing etc.)

Additional hazards information for humans and environment.

Inhaling fumes or mists from overheating fluoropolymers may cause lung irritation and “polymer fume fever” a temporary flu-like illness.

4. FIRST AID MEASURES

Inhalation: If inhaled, remove the affected individual immediately to fresh air.

Call a physician if respiratory irritation develops or if breathing becomes difficult.

Skin Contact: Wash affected areas with plenty of water and soap for several minutes.

Call a physician if irritation develops.

Eye Contact: First rinse eyes with water. Remove any contact lenses, and continue washing with running water for at least 15 minutes.

Call a physician if irritation develops.

Ingestion: If swallowed seek medical attention immediately and show the doctor the packing or label.

Give 3-4 glasses of water, but do not induce vomiting.

If vomiting continues, give water again. Do not give anything to an unconscious or convulsing person.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media: Use dry chemical, alcohol-resistant foam, water spray or carbon dioxide for surrounding fire.

Unsuitable extinguishing media/methods: NONE

Hazardous combustion product or gases: This product is non-flammable. However, if involved in a fire or if overheated (>200 deg. C) there is a risk of generation of toxic degradation products such as hydrogen chloride, hydrogen fluoride, carbonyl fluoride, carbon monoxide, and carbon dioxide. Between 425-450 deg C.

Toxic particulate with a size of 0.2-0.5um may be generated by heat degradation.

Over 470 deg. C, perfluoro isobutylene may be generated by heat degradation.

Special protective equipment for fire fighters:

Wear self-contained breathing apparatus in confined areas or when exposed to combustion products.

Additional information

Move container from fire areas if it can be done without risk.

Cool containers with water spray.

Fire residues and contaminated firefighting water must be disposed of in accordance with local regulations.

6. Accidental Release Measures

Personal precautions:

Ensure adequate ventilation
Use personal protective clothing

Environmental precautions:

Collect contaminated water/firefighting water separately.
Do not wash away into shower or waterway.

Methods for cleaning up/taking up:

Take up with absorbent material (e.g. sand, general-purpose binder)

Additional information:

Information for safe handling looks up chapter 7
Information for disposal looks up chapter 13

7. HANDLING AND STORAGE

Handling

Avoid circumstances that release respirable particles.
For spray applications, use a coarse spray device such as trigger sprayer or pressurized dispenser with particle size production of greater than 15 microns.
Adjust spray pressure to keep particle size greater than 15 microns. DO NOT aerosolize or atomize.
Suitable ventilation must be used during application.
Do not breathe spray. During fumigation/spraying wear suitable respiratory equipment.

Storage

Keep container tightly closed. Keep away from heat, and sunlight.
Storage temperature range: 0 – 40 deg C
If material freezes, gently thaw prior to use. Mild agitation may be required.
Storage Class: 12 (VCI Guideline).

8. EXPOSURE CONTROL/PERSONAL PROTECTION

Ingredients with occupational exposure limits to be monitored: N/A

Exposure controls

Occupational exposure controls

Engineering controls:

Use suitable ventilation to remove spray mists and vapor or fume generated by applications where the fluoropolymers will be exposed to elevated temperatures.
Use exhaust ventilation to keep airborne concentration below exposure limits.

Personal protection

Respiratory protection: An air purifying respirator with organic vapor cartridge or canister

Skin protection: Protective gloves

Eye protection: Chemical goggles and face shield

Additional recommendations:

An eyewash and safety shower should be nearby and ready for use. Hands should be washed thoroughly after handling.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance and Odor: Pale yellow white emulsion, Glycol odor

pH value (25 deg. C): 3.1 – 5.1

Boiling Point: > 100 deg. C

Melting point: N/D

Flash point (method): > 100 deg. C (C.O.C.)

Auto flammability: N/D

Ignition temperature: N/D

Flammability: N/D

Explosive limits: (lower) N/D, (upper) N.D

Oxidizing properties: Non-oxidizing

Vapor pressure (20 deg. C): N/D

Density (25 deg. C): 1.05 – 1.13

Solubility (20 deg. C) in water: Dispersible

Viscosity (20 deg. C): N/D

Solvent content: Dipropylene glycol: 8%

10. STABILITY AND REACTIVITY

Conditions to avoid:

Avoid contact with heat.

Avoid long storage periods in more than 40 deg. C since the product degrades with age.

Stability: Stable under normal temperature and pressure.

Materials to avoid (Incompatibilities):

Oxidizers, alkalis

Hazardous decomposition products:

In a fire situation, hydrogen chloride, hydrogen fluoride, carbonyl fluoride, carbon monoxide, and carbon dioxide may liberate.

11. TOXICOLOGICAL INFORMATION

Acute toxicity:

Oral LD50:>2,000 mg.kg (rat); OECD No. 401

Primary skin irritation: Non-irritant, Index 0.0 (rabbit) OECD No. 404

Primary eye irritation: Minimal irritant, Class3 (rabbit) OECD No. 405

Sensitization: N/D

Mutagenicity:

Ames Assay: Not active. OECD No. 471 B14

12. ECOLOGICAL INFORMATION

Biodegradability: BOD5/CODratio: <0.5 (Not to be readily biodegradable)

BOD5: 26.30 mg O₂/l (at 500mg/l) : EEC Guideline Method C.5

COD: 0.33 mg O₂/mg (at 500mg/l): EEC Guideline Method C.6

67% (biodegradable); OECD No. 302C

Bioaccumulation: N/D

Other information:

Acute fish toxicity: > 1000 mg/l, 06h (rainbow trout) OECD No. 203

Acute Toxicity to Daphnia: EC50 > 1000mg/l, 48h OECD No. 202

Acute toxicity to bacteria: EC10 1500mg/l, EC50 6400mg.l ISO 10712

13. DISPOSAL CONSIDERATIONS

Waste code No.

04 02 14* wastes from finishing containing organic solvents

04 02 15 waste from finishing other than those mentioned in 04 02 14

Reuse when possible the residual product. Send waste product for thermal destruction, using high temperature incinerators designed to burn fluorine compounds.

Reuse containers when possible, after thorough washing. Dispose of waste containers to authorized landfill, in accordance with local laws and regulations.

Comply with all EU, national and local regulations.

Do not dump this product into sewers, on the ground or into any body of water.

14. TRANSPORT INFORMATION

Aqua Guard does not constitute dangerous goods within the meaning of EU legislation on the transport of dangerous goods.

UN No. : Not regulated

Proper Shipping Name: N/A

ADR/RID Status: -----; Class: -----

15. REGULATORY INFORMATION

Classification

Aqua Guard does not constitute dangerous substances within the meaning of the classification, packaging and labeling according to EC Directives.

EEC Classification: Not Classified

Hazard Symbol: Not Classified

Risk Phrases: Not Classified

Safety Phrases: Not Classified

Regulation

TSCA Status:

All components are in full compliance with TSCA Inventory Regulations

Council Directive 92/32/EEC Status:

All monomers and ingredients are listed in the EINECS

VwVwS (17. 05. 1999)_ WGK 1

VOC: None

16. OTHER INFORMATION

N/D: no data

N/A: not applicable

N/E: not established

MAK: maximum workplace concentration

ACGIH: American Conference of Governmental Industrial Hygienists

T.C.C. : Tag Closed Cup

C.O.C.: Cleveland Open Cup

Changes were made in sections: Section 1,2,3, 11(2002. 7) 10, 12 (2003. 1) 1 -15 (2003. 11)

The product is not designed for special applications such as pharmaceutical, medical use.

The information given in this safety data sheet is for safety purposes only. It is given in good faith and based on the best knowledge and experience of the company at the date of issuing. The company is not responsible for any loss or damage caused by the use of the product in applications for which it was not intended or for conditions of use contrary to the recommendations in the safety data sheet.