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SAFETY DATA SHEET

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

1.1. Product identifier

Product name : SCENIC WATER Chemical name : MIXTURE Product number BD43

Synonyms: trade names 1.2.3-PROPANETRIOL.GLYCY ALCOHOL

REACH registration number 01-2119471987-18-XXXX

CAS number 56-81-5 EC number 200-289-5

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

Intended for use as model hobby product.

1.3. Details of the supplier of the safety data sheet

Supplier Deluxe Materials Limited

Unit 13 Cufaude Business Park, Cufaude Lane

Bramley, Tadley, Hampshire RG26 5DL

Tel. + 44 (0) 1256 883944 Fax.+ 44 (0) 1256 883966

Contact info@deluxematerials.com

1.4. Emergency telephone number

Emergency telephone +44(0) 1256 883944 (office hours only)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification Mixture

Physical hazards Not Classified

Health hazards Not Classified

Environmental hazards Not Classified

Human health Not classified as a health hazard according to CLP criteria

Environmental Not considered as an environmental hazard according to CLP criteria

Physicochemical Not considered as a physical hazard under CLP criteria

2.2. Label elements: Not classified

2.3. Other hazards

This substance is not classified as PBT or vPvB according to current EU criteria.

SECTION 3: Composition/information on ingredients

3.2 Mixture

COMPONENTS	REACH	CAS number	EC number	Chemical formula	
	registration				
	number				
GLYCERINE	01-2119471987-	56-81-5	200-289-5	C3H8O3	
	18-XXXX				
WATER SOLUBLE		9000-70-8			
PROTEIN					
Water					

SECTION 4: First aid measures

4.1. Description of first aid measures

General information Get medical attention if any discomfort continues.

Inhalation Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Get medical attention if any discomfort continues. When breathing is difficult, properly trained personnel may assist affected person by administering oxygen.

Ingestion Rinse mouth thoroughly with water. Do not induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Consult a physician for specific advice.

Skin contact Remove contaminated clothing immediately and wash skin with soap and water. Get medical attention if irritation persists after washing.

Eye contact Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15

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minutes. Continue to rinse for at least 15 minutes. Get medical attention if any discomfort continues.

Protection of first aiders First aid personnel should wear appropriate protective equipment during any rescue.

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

General information If adverse symptoms develop as described the casualty should be transferred to hospital as soon as possible.

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Ingestion Gastrointestinal symptoms, including upset stomach. May cause stomach pain or vomiting. Diarrhoea. May cause nausea, headache, dizziness and intoxication.

Skin contact Prolonged contact may cause redness, irritation and dry skin.

Eye contact Irritating to eyes. Symptoms following overexposure may include the following: Redness. Pain.

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

Notes for the doctor No specific recommendations. If in doubt, get medical attention promptly.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog. Unsuitable extinguishing media

Do not use water jet as an extinguisher, as this will spread the fire. Nonalcohol resistant foam

5.2. Special hazards arising from the substance or mixture

Specific hazards Although not classed as flammable this product is combustable. May ignite at high temperature. Hazardous combustion products

Oxides of carbon. Acrid smoke or fumes.

5.3. Advice for firefighters

Protective actions during firefighting

Cool containers exposed to heat with water spray and remove them from the fire area if it can be done without risk. Fight advanced or massive fires from safe distance or protected location.

Control run-off water by containing and keeping it out of sewers and watercourses. If risk of water pollution occurs, notify appropriate authorities.

Special protective equipment for firefighters

Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing. Use protective equipment appropriate for surrounding materials.

SECTION 6: Accidental release measures

 ${\bf 6.1.}\ Personal\ precautions,\ protective\ equipment\ and\ emergency\ procedures$

Personal precautions.

Take care as floors and other surfaces may become slippery. Follow precautions for safe handling described in this safety data sheet. For personal protection, see Section 8.

6.2. Environmental precautions

Environmental precautions Environmental Manager must be informed of all major spillages. Do not discharge into drains or watercourses or onto the ground. Avoid discharge to the aquatic environment. Spillages or uncontrolled discharges into watercourses must be reported immediately to the Environmental Agency or other appropriate regulatory body.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up Stop leak if possible without risk. Extinguish all ignition sources. Avoid sparks, flames, heat and smoking. Ventilate. Avoid the spillage or runoff entering drains, sewers or watercourses.

Take care as floors and other surfaces may become slippery. Contain spillage with sand, earth or other suitable non-combustible material. Collect spillage in containers, seal securely and deliver for disposal according to local regulations. Ensure that waste and contaminated materials are collected and removed from the work area as soon as possible in a suitably labelled container.

6.4. Reference to other sections

Reference to other sections Wear protective clothing as described in Section 8 of this safety data sheet. See Section 11 for additional information on health hazards. Collect and dispose of spillage as indicated in

Section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions Keep away from heat, sparks and open flame. Avoid contact with skin, eyes and clothing. Avoid inhalation of vapours and spray/mists. Use only in well-ventilated areas. Use suitable respiratory protection if ventilation is inadequate.

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Advice on general occupational hygiene

Eye wash facilities and emergency shower must be available when handling this product.

Good personal hygiene procedures should be implemented. Wash at the end of each work shift and before eating, smoking and using the toilet. When using do not eat, drink or smoke.

Clean equipment and the work area every day.

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7.2. Conditions for safe storage, including any incompatibilities

Storage precautions Keep away from oxidising materials, heat and flames. Store in tightly-closed, original container in a well-ventilated place. Bund storage facilities to prevent soil and water pollution in the event of spillage. Storage tanks and other containers must be earthed. Keep away from

food, drink and animal feeding stuffs. Only store in correctly labelled containers. Suitable container materials: Carbon steel. Mild steel. Stainless steel. Aluminium. Do not use containers made of the following materials: Zinc. May attack some plastics, rubber and coatings.

Storage class Chemical storage.

7.3. Specific end use(s)

Specific end use(s) The identified uses for this product are detailed in Section 1.2.

SECTION 8: Exposure Controls/personal protection

Not determined.

The following information on exposure controls applies to component glycerine.

8.1. Control parameters

Occupational exposure limits

Long-term exposure limit (8-hour TWA): WEL 10 mg/m³ mist

WEL = Workplace Exposure Limit

DNEL Industry - Inhalation; Long term systemic effects: 56 mg/m³

Consumer - Inhalation; Long term systemic effects: 33 mg/m³

Consumer - Oral; Long term systemic effects: 229 mg/kg/day

PNEC Industry - Fresh water; Long term 0.885 mg/l

Industry - Marine water; Long term 0.0885 mg/l

Industry - Intermittent release; Long term 8.85 mg/l

Industry - Sediment (Freshwater); Long term 3.3 mg/kg

Industry - Sediment (Marinewater); Long term 0.33 mg/kg

Industry - Soil; Long term 0.141 mg/kg

8.2. Exposure controls

Protective equipment

Appropriate engineering controls

As this product contains ingredients with exposure limits, process enclosures, local exhaust ventilation or other engineering controls should be used to keep worker exposure below any statutory or recommended limits, if use generates dust, fumes, gas, vapour or mist. Ensure the ventilation system is regularly maintained and tested. Use explosion-proof electrical, ventilating and lighting equipment. This product must not be handled in a confined space without adequate ventilation. In case of insufficient ventilation, wear suitable respiratory equipment.

Eye/face protection Wear eye protection. Tight-fitting safety glasses. If risk of splashing, wear safety goggles or face shield. Personal protective equipment for eye and face protection should comply with European Standard EN166.

Hand protection Wear protective gloves. The selected gloves should have a breakthrough time of at least 8 hours. It is recommended that gloves are made of the following material: Polyethylene. Viton rubber (fluoro rubber). Neoprene. Nitrile rubber Butyl rubber. For short-term / splash protection the following are recommended Polyvinyl alcohol (PVA). To protect hands from chemicals, gloves should comply with European Standard EN374. The most suitable glove should be chosen in consultation with the glove supplier/manufacturer, who can provide information about the breakthrough time of the glove material.

Other skin and body

protection

Wear appropriate clothing to prevent any possibility of liquid contact and repeated or prolonged vapour contact. Provide eyewash station and safety shower.

Hygiene measures Do not eat, drink or smoke when using this product. Wash at the end of each work shift and before eating, smoking and using the toilet. Remove contaminated clothing and protective equipment before entering eating areas. Contaminated clothing should be placed in a closed container for disposal or decontamination.

Respiratory protection If ventilation is inadequate, suitable respiratory protection must be worn. Wear a respirator

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fitted with the following cartridge: Organic vapour filter. Ensure all respiratory protective equipment is suitable for its intended use and is 'CE'-marked. Gas and combination filter cartridges should comply with European Standard EN14387. Change filter cartridge on respirator daily. Check that the respirator fits tightly and the filter is changed regularly. Respirator selection must be based on exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Environmental exposure controls

Keep container tightly sealed when not in use.

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Appearance: gelatinous solid. Colour: slightly amber, clear Odour : characteristic Melting point: 37C

Initial boiling point and range – not determined

Flash point 198° C CC (Closed cup). Upper/lower flammability or Vapour pressure Not determined

Bulk density

Solubility(ies) Miscible with water. Soluble in the following materials: Organic solvents.

Partition coefficient log Pow: -Auto-ignition temperature 370° C

Viscosity

9.2. Other information

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity The following materials may react with the product: Strong oxidising agents. Strong acids.

Strong alkalis.

10.2. Chemical stability

Stability Stable at normal ambient temperatures and when used as recommended.

10.3. Possibility of hazardous reactions

Possibility of hazardous

reactions

Reacts with strong oxidising agents Reacts with strong acids Reacts with strong alkalis

10.4. Conditions to avoid

Conditions to avoid Avoid heat, flames and other sources of ignition. Avoid contact with strong oxidising agents.

10.5. Incompatible materials

Materials to avoid Strong oxidising agents. Strong acids. Strong alkalis.

10.6. Hazardous decomposition products

Hazardous decomposition

products

Oxides of carbon. Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity - oral

Notes (oral LD 5 0) LD 5 0 12,600 mg/kg, Oral, Rat

Acute toxicity - dermal

Notes (dermal LD 5 0) LD 5 0 > 18,700 mg/kg, Dermal, Rabbit

Acute toxicity - inhalation

Notes (inhalation LC₅₀) LC50 > 2.75 mg/l/4hr/day, Inhalation, Guinea pig

Skin corrosion/irritation

Animal data Not classified as irritating to skin

Serious eve damage/irritation

Serious eye damage/irritation Not classified as irritating to eyes

Respiratory sensitisation: Respiratory sensitisation Not classified as a respiratory sensitiser

Skin sensitisation: Not classified as a skin senistiser

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Germ cell mutagenicity

Genotoxicity - in vitro Does not contain any substances known to be mutagenic.

Carcinogenicity Does not contain any substances known to be carcinogenic.

Reproductive toxicity

Reproductive toxicity - fertility Based on available data the classification criteria are not met.

Reproductive toxicity -This substance has no evidence of toxicity to reproduction.

Specific target organ toxicity - single exposure

STOT - single exposure Not classified as a specific target organ toxicant after a single exposure.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure Not classified as a specific target organ toxicant after repeated exposure.

Aspiration hazard Not considered an aspiration hazard.

Inhalation Vapours/aerosol spray may irritate the respiratory system. Vapours and spray/mists in high concentrations are narcotic.

Ingestion Gastrointestinal symptoms, including upset stomach. Symptoms following overexposure may include the following: Stomach pain. Diarrhoea. Drowsiness, dizziness, disorientation, vertigo.

Nausea, vomiting.

Skin contact Prolonged and frequent contact may cause redness and irritation.

Eye contact Vapour or spray in the eyes may cause irritation and smarting.

Acute and chronic health hazards

This product has low toxicity. Only large volumes may have adverse impact on human health.

Route of entry Inhalation Ingestion.

Target organs No specific target organs known.

Medical considerations Skin disorders and allergies. Splash in eye requires examination by eye specialist.

SECTION 12: Ecological Information

Ecotoxicity The product components are not classified as environmentally hazardous. However, large or frequent spills may have hazardous effects on the environment.

12.1. Toxicity

Acute toxicity - fish LC50, 96 hours: 54,000 mg/l, Onchorhynchus mykiss (Rainbow trout)

Acute toxicity - aquatic

invertebrates

EC $_{5}$ $_{0}$, 24 hours: > 10,000 mg/l, Daphnia magna

Acute toxicity - aquatic plants EC 5 0, 48 hours: > 2,900 mg/l, Scenedesmus subspicatus

Acute toxicity - microorganisms

EC₈₀, 72 hours: > 10,000 mg/l, Activated sludge

12.2. Persistence and degradability

Persistence and degradability Readily biodegradable

12.3. Bioaccumulative potential

Bioaccumulative potential The product is not bioaccumulating.

Partition coefficient log Pow: - 1.76

12.4. Mobility in soil

Mobility The product is water-soluble and may spread in water systems. If product enters soil it will be mobile and may contaminate groundwater.

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB

assessment

This product does not contain any substances classified as PBT or vPvB.

12.6. Other adverse effects

Other adverse effects: No adverse effects are expected

SECTION 13: Disposal considerations

13.1. Waste treatment methods

General information Waste is classified as hazardous waste. Disposal to licensed waste disposal site in accordance with the local Waste Disposal Authority. Contaminated packages must be completely emptied before sending away for laundering and re-use When handling waste, the safety precautions applying to handling of the product should be considered.

Disposal methods Collect and place in suitable waste disposal containers and seal securely. Empty containers or liners may retain some product residues and hence be potentially hazardous. Label the containers containing waste and contaminated materials and remove from the area as soon as possible. Waste, residues, empty containers, discarded work clothes and contaminated cleaning materials should be collected in designated containers, labelled with their contents.

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Disposal of this product, process solutions, residues and by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any local authority requirements. Confirm disposal procedures with environmental engineer and local regulations. Avoid the spillage or runoff entering drains, sewers or watercourses. Waste class Water hazard class 1

SECTION 14: Transport information

General: Not classified as hazardous for conveyance

14.1. UN number: Not applicable.

14.2. UN proper shipping name: Not applicable.

14.3. Transport hazard class(es): No transport warning sign required.

14.4. Packing group: Not applicable.

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant: No.

14.6. Special precautions for user

Not applicable.

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Transport in bulk according to Annex II of MARPOL 73/78

and the IBC Code

Not listed

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

National regulations Health and Safety at Work etc. Act 1974 (as amended).

Control of Substances Hazardous to Health Regulations 2002 (as amended).

Dangerous Substances and Explosive Atmospheres Regulations 2002.

The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment

Regulations 2009 (SI 2009 No. 1348) (as amended) ["CDG 2009"].

EU legislation Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18

 $\label{lem:concerning} \ \ \text{December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of the Concerning Concernin$

Chemicals (REACH) (as amended).

Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16

December 2008 on classification, labelling and packaging of substances and mixtures (as amended).

Commission Decision 2000/532/EC as amended by Decision 2001/118/EC establishing a list

of wastes and hazardous waste pursuant to Council Directive 75/442/EEC on waste and

Directive 91/689/EEC on hazardous waste with amendments.

Guidance Workplace Exposure Limits EH40.

Introduction to Local Exhaust Ventilation HS(G)37.

Safety Data Sheets for Substances and Preparations.

Authorisations

Regulation 1907/2006)

No specific authorisations are known for components of this product.

No specific restrictions on use are known for the the components of this product.

SECTION 16: Other information

Key literature references and sources for data

Dangerous Properties of Industrial Materials Report, N.Sax et.al. Registry of Toxic Effects of

Chemical Substances (RTECS). ECHA

Revision date 21/05/2015

Revision 2

SDS number

Risk phrases in full NC: Not classified.

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