

SAFETY DATA SHEET

Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II - Europe

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

1.1 Product identifier

: GS9D-50003:SOLARAQUA PROCESS CYAN:DK03

- Product name Product code
- : GS9D-50003
- Trade name
- : SOLARAQUA

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

Identified uses		
Colorant; Printing ink related material; Printing ink.		
Uses advised against Reason		
Not applicable.		

1.3 Details of the supplier of the safety data sheet

Manufacturer/ Distributor	: SUN CHEMICAL ELIZABETHAN WAY MILNROW ROCHDALE LANCASHIRE OL16 4LE UNITED KINGDOM (44) 1706 889600
e-mail address of person responsible for this SDS	: regulatory.affairs@sunchemical.com

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Product definition : Mixture

Classification according to Directive 1999/45/EC [DPD]

The product is classified as dangerous according to Directive 1999/45/EC and its amendments.

Classification : R43

Human health hazards : May cause sensitisation by skin contact.

See Section 16 for the full text of the R-phrases declared above.

See Section 11 for more detailed information on health effects and symptoms.

2.2 Label elements

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SECTION 2: Hazards identification

Hazard symbol or symbols



Indication of danger	: Irritant
Risk phrases	: R43- May cause sensitisation by skin contact.
Safety phrases	: S24- Avoid contact with skin. S37- Wear suitable gloves.
Hazardous ingredients	: Rosin, fumarated
Supplemental label elements	: Not applicable.

2.3 Other hazards		
Other hazards which do	:	None known.
not result in classification		

SECTION 3: Composition/information on ingredients

Substance/mixture	: Mixture				
			Class	sification	
Product/ingredient name	Identifiers	%	67/548/EEC	Regulation (EC) No. 1272/2008 [CLP]	Туре
Rosin, fumarated ammonia	EC: 266-040-8 CAS: 65997-04-8 REACH #: 01-2119488876-14 EC: 215-647-6 CAS: 1336-21-6 Index: 007-001-01-2	2.5 - 5 < 1	R43 R52/53 C; R34 N; R50	Skin Sens. 1, H317 Aquatic Chronic 3, H412 Skin Corr. 1B, H314 Eye Dam. 1, H318 STOT SE 3, H335 Aquatic Acute 1, H400	[1]
			See Section 16 for the full text of the R- phrases declared above.	See Section 16 for the full text of the H statements declared above.	

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment, are PBTs or vPvBs or have been assigned a workplace exposure limit and hence require reporting in this section.

Туре

[1] Substance classified with a health or environmental hazard

[2] Substance with a workplace exposure limit

[3] Substance meets the criteria for PBT according to Regulation (EC) No. 1907/2006, Annex XIII

[4] Substance meets the criteria for vPvB according to Regulation (EC) No. 1907/2006, Annex XIII

[5] Substance of equivalent concern

Occupational exposure limits, if available, are listed in Section 8.

SECTION 4: First aid measures

4.1 Description of first aid measures

4.1 Description of first alu fi	leasures
General	 In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and seek medical advice.
Eye contact	: Check for and remove any contact lenses. Immediately flush eyes with room temperature water for at least 15 minutes, keeping eyelids open. In case of accidental eye contact, avoid concurrent exposure to the sun or other sources of UV light which may increase the sensitivity of the eyes.
Inhalation	 Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel.
Skin contact	 Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognised skin cleanser. Do NOT use solvents or thinners.
Ingestion	 If swallowed, seek medical advice immediately and show the container or label. Keep person warm and at rest. Do NOT induce vomiting.
Protection of first-aiders	: No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

4.2 Most important symptoms and effects, both acute and delayed

There are no data available on the mixture itself. The mixture has been assessed following the conventional method of the Dangerous Preparations Directive 1999/45/EC and classified for toxicological hazards accordingly. See Sections 2 and 3 for details.

Exposure to component solvent vapour concentrations in excess of the stated occupational exposure limit may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, loss of consciousness.

Solvents may cause some of the above effects by absorption through the skin. Repeated or prolonged contact with the mixture may cause removal of natural fat from the skin, resulting in non-allergic contact dermatitis and absorption through the skin.

If splashed in the eyes, the liquid may cause irritation and reversible damage.

This takes into account, where known, delayed and immediate effects and also chronic effects of components from short-term and long-term exposure by oral, inhalation and dermal routes of exposure and eye contact.

Contains Rosin, fumarated. May produce an allergic reaction.

4.3 Indication of any immediate medical attention and special treatment needed

Notes to medical doctor	: In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
Specific treatments	• No specific treatment

pecific treatments : No specific treatment.

SECTION 5: Firefighting measures

5.1 Extinguishing media	
Suitable extinguishing media	: Use dry chemical, CO ₂ , water spray (fog) or foam.
Unsuitable extinguishing media	: Do not use water jet.

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SECTION 5: Firefighting measures

5.2 Special hazards arising from the substance or mixture		
Hazards from the substance or mixture	:	Fire will produce dense black smoke. Exposure to decomposition products may cause a health hazard.
Hazardous thermal decomposition products	:	Decomposition products may include the following materials: carbon monoxide, carbon dioxide, smoke, oxides of nitrogen.
5.3 Advice for firefighters		
Special protective actions for fire-fighters	:	Cool closed containers exposed to fire with water. Do not release runoff from fire to drains or watercourses.
Special protective equipment for fire-fighters	:	Appropriate breathing apparatus may be required.

SECTION 6: Accidental release measures

Due to the organic solvents content of the mixture:

6.1 Personal precautions, pro	ive equipment and emergency procedures	
For non-emergency personnel	Exclude sources of ignition and ventilate the area. Avoid breathing vapour or Refer to protective measures listed in sections 7 and 8.	mist.
For emergency responders	f specialised clothing is required to deal with the spillage, take note of any nformation in Section 8 on suitable and unsuitable materials. See also Section additional information on hygiene measures.	on 8 for
6.2 Environmental precautions	Do not allow to enter drains or watercourses. If the product contaminates lake ivers, or sewers, inform the appropriate authorities in accordance with local egulations.	} \$,
6.3 Methods and materials for containment and cleaning up	Contain and collect spillage with non-combustible, absorbent material e.g. sate earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Preferably clean with a deterg Avoid using solvents.	

SECTION 7: Handling and storage

7.1 Precautions for safe handling	: Due to the organic solvents content of the mixture:
-	Vapours are heavier than air and may spread along floors. Vapours may form explosive mixtures with air. Prevent the creation of flammable or explosive concentrations of vapours in air and avoid vapour concentrations higher than the occupational exposure limits.
	In addition, the product should only be used in areas from which all naked lights and other sources of ignition have been excluded. Electrical equipment should be protected to the appropriate standard.
	Keep container tightly closed. Keep away from heat, sparks and flame. No sparking tools should be used.
	 Avoid contact with skin and eyes. Avoid the inhalation of dust, particulates, spray or mist arising from the application of this mixture. Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Put on appropriate personal protective equipment (see Section 8). Never use pressure to empty. Container is not a pressure vessel. Always keep in containers made from the same material as the original one. Comply with the health and safety at work laws.

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SECTION 7: Handling and storage

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7.2 Conditions for safe storage, including any incompatibilities	 Store between the following temperatures: 5 - 35 °C Store in accordance with local regulations. Notes on joint storage Keep away from: oxidising agents, strong alkalis, strong acids. Additional information on storage conditions Observe label precautions. Store in a dry, cool and well-ventilated area. Keep away from heat and direct sunlight. Keep container tightly closed. Keep away from sources of ignition. No smoking. Prevent unauthorised access. Containers that have been opened must be carefully resealed and kept upright to prevent leakage.
7.3 Specific end use(s) Recommendations Industrial sector specific solutions	Not available. Not available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limits No exposure limit value known.

Recommended monitoring procedures	: If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

8.2 Exposure controls

Appropriate engineering	: Provide adequate ventilation. Where reasonably practicable, this should be
controls	achieved by the use of local exhaust ventilation and good general extraction. If
	these are not sufficient to maintain concentrations of particulates and solvent
	vapours below the OEL, suitable respiratory protection must be worn.

Individual protection measures

Hygiene measures	: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
Eye/face protection	: Use safety eyewear designed to protect against splash of liquids.
Skin protection	
Hand protection	: Barrier creams may help to protect the exposed areas of the skin but should not be applied once exposure has occurred.

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SECTION 8: Exposure controls/personal protection

Gloves	: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
Body protection	 Personnel should wear antistatic clothing made of natural fibres or of high- temperature-resistant synthetic fibres.
Respiratory protection	: If workers are exposed to concentrations above the exposure limit, they must use appropriate, certified respirators.
Environmental exposure controls	: Do not allow to enter drains or watercourses.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties **Physical state** : Liquid. Colour : Blue. Odour : Characteristic. Odour threshold : Not applicable. Melting point/freezing point : Not applicable. Flash point : >93.3°C (200F) voc : 3% : 7 to 8.5 pН Lower explosion limit : Lower: 2.6% Upper: 12.6% **Boiling point** : Lowest known value: 100°C (212°F) **Evaporation rate** : Highest known value: <1 (water) Weighted average: 0.86compared with butyl acetate Upper/lower flammability or : Not tested explosive limits Vapour pressure : 3.2 kPa (23.8 mm Hg) Vapour density : Not tested **Relative density** : Not tested Solubility(ies) : Not tested Partition coefficient: n-octanol/ : Not applicable. water Auto-ignition temperature : Not applicable. **Decomposition temperature** : Not applicable. Viscosity : Not tested **Explosive properties** : Not applicable. **Oxidising properties** : Not applicable.

9.2 Other information

No additional information.

SECTION 10: Stability and reactivity

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10.1 Reactivity		: No specific test data related to reactivity available for this product or its ingredients.
10.2 Chemical stability	:	: Stable under recommended storage and handling conditions (see Section 7).
10.3 Possibility of hazardous reactions	:	: Under normal conditions of storage and use, hazardous reactions will not occur.
10.4 Conditions to avoid	:	 When exposed to high temperatures may produce hazardous decomposition products.
10.5 Incompatible materials	:	 Keep away from the following materials to prevent strong exothermic reactions: oxidising agents, strong alkalis, strong acids.
10.6 Hazardous decomposition products	:	 Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

There are no data available on the mixture itself. The mixture has been assessed following the conventional method of the Dangerous Preparations Directive 1999/45/EC and classified for toxicological hazards accordingly. See Sections 2 and 3 for details.

Exposure to component solvent vapour concentrations in excess of the stated occupational exposure limit may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, loss of consciousness.

Solvents may cause some of the above effects by absorption through the skin. Repeated or prolonged contact with the mixture may cause removal of natural fat from the skin, resulting in non-allergic contact dermatitis and absorption through the skin.

If splashed in the eyes, the liquid may cause irritation and reversible damage.

This takes into account, where known, delayed and immediate effects and also chronic effects of components from short-term and long-term exposure by oral, inhalation and dermal routes of exposure and eye contact.

Contains Rosin, fumarated. May produce an allergic reaction.

11.1 Information on toxicological effects

Acute toxicity

Not determined - Classification according to Directive 1999/45/EC [DPD]

Irritation/Corrosion

Not determined - Classification according to Directive 1999/45/EC [DPD]

Sensitisation

Not determined - Classification according to Directive 1999/45/EC [DPD]

Mutagenicity

Not applicable.

Carcinogenicity

Not applicable.

Reproductive toxicity

Not determined - Classification according to Directive 1999/45/EC [DPD]

Teratogenicity

Not applicable.

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SECTION 11: Toxicological information

SECTION 12: Ecological information

There are no data available on the mixture itself. Do not allow to enter drains or watercourses.

The mixture has been assessed following the conventional method of the Dangerous Preparations Directive 1999/45/EC and is not classified as dangerous for the environment but contains a substance or substances dangerous for the environment. See section 3 for details.

12.1 Toxicity

ammonia Acute LC50 15000 µg/l Fresh water Fish - Gambusia affinis - Adult 96 hours

12.2 Persistence and degradability

Not available.

12.3 Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
Rosin, fumarated	2.7	-	low

12.4 Mobility in soil	
Soil/water partition coefficient (Koc)	: Not available.
Mobility	: Not available.

2.5 Results of PBT and vPvB assessment	
РВТ	: Not applicable.
vPvB	: Not applicable.

12.6 Other adverse effects : No known significant effects or critical hazards.

SECTION 13: Disposal considerations

Do not allow to enter drains or watercourses.

Dispose of according to all federal, state and local applicable regulations.

If this product is mixed with other wastes, the original waste product code may no longer apply and the appropriate code should be assigned.

For further information, contact your local waste authority.

13.1 Waste treatment methods

Product

Methods of disposal: The generation of waste should be avoided or minimised wherever possible.
Disposal of this product, solutions and any by-products should at all times comply
with the requirements of environmental protection and waste disposal legislation
and any regional local authority requirements. Dispose of surplus and non-
recyclable products via a licensed waste disposal contractor. Waste should not be
disposed of untreated to the sewer unless fully compliant with the requirements of
all authorities with jurisdiction.

Packaging

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SECTION 13: Disposal considerations Methods of disposal : The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. European Waste Catalogue (EWC): : 08 03 12 waste ink containing dangerous substances Special precautions : This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of

spilt material and runoff and contact with soil, waterways, drains and sewers.

SECTION 14: Transport information

ADR/RID	ADN	IMDG	ΙΑΤΑ
Not regulated			
not regulated.	Not regulated.	Not regulated.	Not regulated.
Not regulated.	Not regulated.	Not regulated.	Not regulated.
Not regulated.	Not regulated.	Not regulated.	Not regulated.
-	-	-	-
No.	No.	No.	No.
-	-	-	-
	Not regulated.	Not regulated. Not regulated. Not regulated. Not regulated. - -	Not regulated. Not regulated. Not regulated. Not regulated. Not regulated. Not regulated. - -

14.6 Special
precautions for
userTransport within user's premises: always transport in closed containers that are upright and
secure. Ensure that persons transporting the product know what to do in the event of an
accident or spillage.

14.7 Transport in bulk: Not available.according to Annex II ofMARPOL 73/78 and the IBCCode

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture <u>EU Regulation (EC) No. 1907/2006 (REACH)</u>

Annex XIV - List of substances subject to authorisation

Substances of very high concern

None of the components are listed.

SECTION 15: Regulatory information

-	-
Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles	: Not applicable.
Other EU regulations	
Industrial use	: The information contained in this safety data sheet does not constitute the user's own assessment of workplace risks, as required by other health and safety legislation. The provisions of the national health and safety at work regulations apply to the use of this product at work.
15.2 Chemical Safety Assessment	: This product contains substances for which Chemical Safety Assessments are still to be received.

SECTION 16: Other information

Date of issue	: 2 April, 2014 Page: 10/11
Notice to reader	
Version	: 0.01
Date of previous issue	: No previous validation.
Date of issue/ Date of revision	: 4/2/2014.
Date of printing	: 8/5/2014.
Full text of classifications [DSD/DPD]	: C - Corrosive N - Dangerous for the environment
Full text of abbreviated R phrases	 R34- Causes burns. R43- May cause sensitisation by skin contact. R50- Very toxic to aquatic organisms. R52/53- Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
Full text of classifications [CLP/GHS]	: Aquatic Acute 1, H400 Aquatic Chronic 3, H412 Eye Dam. 1, H318 Skin Corr. 1B, H314 Skin Sens. 1, H317 STOT SE 3, H335 ACUTE AQUATIC HAZARD - Category 1 LONG-TERM AQUATIC HAZARD - Category 3 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1 SKIN CORROSION/IRRITATION - Category 1 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) [Respiratory tract irritation] - Category 3
Full text of abbreviated H statements	 H314 Causes severe skin burns and eye damage. H317 May cause an allergic skin reaction. H318 Causes serious eye damage. H335 May cause respiratory irritation. H400 Very toxic to aquatic life. H412 Harmful to aquatic life with long lasting effects.
Indicates information that Abbreviations and acronyms	 thas changed from previously issued version. ATE = Acute Toxicity Estimate CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008] DNEL = Derived No Effect Level EUH statement = CLP-specific Hazard statement PNEC = Predicted No Effect Concentration RRN = REACH Registration Number
	t has changed from previously issued version.
CEPE code	: 2

SECTION 16: Other information

The information in this SDS is based on the present state of our knowledge and on current laws. The product is not to be used for purposes other than those specified under section 1 without first obtaining written handling instructions. It is always the responsibility of the user to take all necessary steps to fulfil the demands set out in the local rules and legislation. The information in this SDS is meant to be a description of the safety requirements for our product. It is not to be considered a guarantee of the product's properties.

Annex