

Safety Data Sheet

Issue Date: 27-Sep-2023

Revision Date: 27-Sep-2023

Version 1

1. IDENTIFICATION

Product identifier

Product Name Solution G

Other means of identification

SDS # SYS-090

Recommended use of the chemical and restrictions on use

Recommended Use Laboratory chemicals.

Details of the supplier of the safety data sheet

Supplier Address

Sysmex America, Inc.
577 Aptakistic Road
Lincolnshire, IL 60069
USA

Company Phone Number 224-543-9500

Emergency telephone number

Emergency Telephone ChemTel Inc. 800-255-3924 (North America)
1-813-248-0585 (International)

2. HAZARDS IDENTIFICATION

Appearance Colorless liquid

Physical state Liquid

Odor Characteristic

Classification

This chemical does not meet the hazardous criteria set forth by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200). However, this Safety Data Sheet (SDS) contains valuable information critical to the safe handling and proper use of this product. This SDS should be retained and available for employees and other users of this product.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical name	CAS No	Weight-%
Glycerol	56-81-5	10-25

If Chemical Name/CAS No is "proprietary" and/or Weight-% is listed as a range, the specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

Description of first aid measures

General Advice Take affected persons out into the fresh air. Do not leave affected persons unattended.

Eye Contact Rinse opened eye for several minutes under running water. Then consult a doctor.

Skin Contact Immediately wash with water and soap and rinse thoroughly.

Inhalation	Supply fresh air; consult doctor in case of complaints.
Ingestion	Call for a doctor immediately.

Most important symptoms and effects, both acute and delayed

Symptoms	May be harmful if inhaled.
-----------------	----------------------------

Indication of any immediate medical attention and special treatment needed

Notes to Physician	Treat symptomatically.
---------------------------	------------------------

5. FIRE-FIGHTING MEASURES**Suitable Extinguishing Media**

CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

Unsuitable Extinguishing Media Not determined.

Specific Hazards Arising from the Chemical

Formation of toxic gases is possible during heating or in case of fire.

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES**Personal precautions, protective equipment and emergency procedures**

Personal Precautions	Ensure adequate ventilation. Wear protective clothing.
-----------------------------	--

Environmental precautions

Environmental precautions	Do not allow to enter sewers/surface or ground water. See Section 12 for additional Ecological Information.
----------------------------------	---

Methods and material for containment and cleaning up

Methods for Containment	Absorb with liquid-binding material (sand, diatomite, universal binders, sawdust).
Methods for Clean-Up	Keep in suitable, closed containers for disposal.

7. HANDLING AND STORAGE**Precautions for safe handling**

Advice on Safe Handling	Keep away from heat and direct sunlight. Ensure good ventilation/exhaustion at the workplace. Store in cool, dry place in tightly closed receptacles.
--------------------------------	---

Conditions for safe storage, including any incompatibilities

Storage Conditions	Store only in the original receptacle. Store in a cool location. Store away from foodstuffs. Store away from oxidizers. Keep container tightly closed. Store in cool, dry conditions in well sealed receptacles.
Incompatible Materials	None known based on information supplied.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

Chemical name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Glycerol 56-81-5	-	TWA: 15 mg/m ³ mist, total particulate TWA: 5 mg/m ³ mist, respirable fraction (vacated) TWA: 10 mg/m ³ mist, total particulate (vacated) TWA: 5 mg/m ³ mist, respirable fraction	-

Appropriate engineering controls

Engineering Controls Showers. Eyewash stations. Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/Face Protection Tightly sealed goggles. Refer to 29 CFR 1910.133 for eye and face protection regulations.

Skin and Body Protection Protective gloves. Refer to 29 CFR 1910.138 for appropriate skin and body protection.

Respiratory Protection Not necessary if room is well-ventilated. Refer to 29 CFR 1910.134 for respiratory protection requirements.

General Hygiene Considerations Keep away from foodstuffs, beverages and feed. Immediately remove all soiled and contaminated clothing. Wash hands before breaks and at the end of work. Avoid contact with the eyes and skin.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state	Liquid	Odor	Characteristic
Appearance	Colorless liquid	Odor Threshold	Not determined
Color	Colorless		
<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>	
pH	No data available		
Melting point / freezing point	No data available		
Initial boiling point and boiling range	No data available		
Flash point	No data available		
Evaporation Rate	Not determined		
Flammability (Solid, Gas)	Liquid-Not applicable		
Flammability Limit in Air			
Upper flammability or explosive limits	No data available		
Lower flammability or explosive limits	No data available		
Vapor Pressure	23 hPa		
Vapor Density	No data available		
Relative Density	Not determined		
Water Solubility	Fully miscible		
Solubility in other solvents	Not determined		
Partition Coefficient	Not determined		
Autoignition temperature	Product is not self igniting		

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
Hyphen	Not determined	
Kinematic viscosity	Not determined	
Dynamic Viscosity	Not determined	
Explosive Properties	Product does not present an explosion hazard	
Oxidizing Properties	Not determined	

10. STABILITY AND REACTIVITY

Reactivity

Not reactive under normal conditions.

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

None under normal processing.

Conditions to Avoid

Keep out of reach of children.

Incompatible materials

None known based on information supplied.

Hazardous decomposition products

Carbon oxides.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Eye Contact	Avoid contact with eyes.
Skin Contact	Avoid contact with skin.
Inhalation	May be harmful if inhaled.
Ingestion	Do not ingest.

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Glycerol 56-81-5	= 12600 mg/kg (Rat)	> 10 g/kg (Rabbit)	> 2.75 mg/L (Rat) 4 h

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms	Please see section 4 of this SDS for symptoms.
-----------------	--

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Carcinogenicity	Based on the information provided, this product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC or NTP.
------------------------	---

Numerical measures of toxicity

The following values are calculated based on chapter 3.1 of the GHS document

Oral LD50	50,400.00 mg/kg
Dermal LD50	40,000.00 mg/kg
ATEmix (inhalation-dust/mist)	11.00 mg/l

12. ECOLOGICAL INFORMATION

Ecotoxicity

The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Component Information

Chemical name	Algae/aquatic plants	Fish	Crustacea
Glycerol 56-81-5		LC50: 51 - 57mL/L (96h, Oncorhynchus mykiss)	

Persistence/Degradability

Not determined.

Bioaccumulation

There is no data for this product.

Mobility

Chemical name	Partition coefficient
Glycerol 56-81-5	-1.75

Other adverse effects

Not determined

13. DISPOSAL CONSIDERATIONS

Waste Treatment Methods

Disposal of Wastes	Disposal should be in accordance with applicable regional, national and local laws and regulations.
Contaminated Packaging	Disposal should be in accordance with applicable regional, national and local laws and regulations.

14. TRANSPORT INFORMATION

Note Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances.

DOT Not regulated

IATA Not regulated

IMDG Not regulated

15. REGULATORY INFORMATION

International Inventories

Chemical name	TSCA	TSCA Inventory Status	DSL/NDSL	EINECS/ELINCS	ENCS	IECSC	KECL	PICCS	AICS
Glycerol	X	ACTIVE	X	X	X	X	X	X	X

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

US Federal Regulations

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355).

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania
Glycerol 56-81-5	X	X	X

16. OTHER INFORMATION

<u>NFPA</u>	Health hazards	Flammability	Instability	Special hazards
	-	-	-	-
<u>HMIS</u>	Health hazards	Flammability	Physical hazards	Personal Protection
	-	-	-	Not determined

Issue Date: 27-Sep-2023
Revision Date: 27-Sep-2023
Revision Note: New format

Disclaimer

The information provided in this Safety Data Sheet is 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.

End of Safety Data Sheet