

Safety Data Sheet

acc. to OSHA HCS

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Supplier Details: Omega Engineering, Inc.

800 Connecticut Avenue, Suite 5N01,

Norwalk, CT 06854 USA

Model Number: PHFS-7151 SDS-0082

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Reviewed on 09/19/2012

* 1 Identification

Product identifier

Trade name: **Standard Gel Sat KCl/AgCl**

Article number: 63004351

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

Application of the substance / the preparation *Laboratory chemicals*

Details of the supplier of the safety data sheet

Manufacturer/Supplier:

Endress+Hauser Conducta Inc.
4123 E. La Palma Ave., Suite 200
Anaheim
CA 92807-1813
USA

Information department:

Phone: +49 (0)7156 209-117
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Emergency telephone number: Phone: +49(0)6131-19240

* 2 Hazard(s) identification

Classification of the substance or mixture

The product is not classified according to the Globally Harmonized System (GHS).

Classification according to Directive 67/548/EEC or Directive 1999/45/EC *Not applicable.*

Information concerning particular hazards for human and environment:

The product does not have to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

Classification system:

The classification was made according to the latest editions of international substances lists, and expanded upon from company and literature data.

Label elements

Labelling according to EU guidelines:

Observe the general safety regulations when handling chemicals.

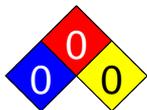
The product is not subject to identification regulations according to directives on hazardous materials.

Safety phrases:

29 Do not empty into drains.

Classification system:

NFPA ratings (scale 0 - 4)



Health = 0
Fire = 0
Reactivity = 0

HMIS-ratings (scale 0 - 4)



Health = 0
Fire = 0
Reactivity = 0

Other hazards

The product does not contain any organic halogen compounds (AOX), nitrates, heavy metal compounds or formaldehydes.

Results of PBT and vPvB assessment

PBT: *Not applicable.*

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vPvB: Not applicable.

*** 3 Composition/information on ingredients****Chemical characterization: Mixtures****Description:** Mixture of the substances listed below with nonhazardous additions.

Dangerous components:			
56-81-5	glycerol		25-35%
Non Dangerous Components			
7447-40-7	potassium chloride		20-25%
9004-62-0	Hydroxyethylcellulose		≤ 1%
7783-90-6	silver chloride	⚠ H314	≤ 1%
82784-95-0	Zonyl FSJ	R10-67 ⚠ H226; ⚠ H336	≤ 1%
7732-18-5	water, distilled or of similar purity		45-55%

Additional information: For the wording of the listed risk phrases refer to section 16.*** 4 First-aid measures****Description of first aid measures****General information:** No special measures required.**After inhalation:** Supply fresh air; consult doctor in case of complaints.**After skin contact:** Generally the product does not irritate the skin.**After eye contact:** Rinse opened eye for several minutes under running water.**After swallowing:** If symptoms persist consult doctor.**Information for doctor:****Most important symptoms and effects, both acute and delayed**

No further relevant information available.

Indication of any immediate medical attention and special treatment needed

No further relevant information available.

*** 5 Fire-fighting measures****Extinguishing media****Suitable extinguishing agents:**CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.**For safety reasons unsuitable extinguishing agents:****Special hazards arising from the substance or mixture** No further relevant information available.**Advice for firefighters****Protective equipment:** No special measures required.**6 Accidental release measures****Personal precautions, protective equipment and emergency procedures** Not required.**Environmental precautions:**

Do not allow product to reach sewage system or any water course.

Inform respective authorities in case of seepage into water course or sewage system.

Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Reference to other sections

No dangerous substances are released.

See Section 7 for information on safe handling.

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See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

* 7 Handling and storage

Handling:

Precautions for safe handling *No special measures required.*

Information about protection against explosions and fires: *No special measures required.*

Conditions for safe storage, including any incompatibilities

Storage:

Requirements to be met by storerooms and receptacles: *No special requirements.*

Information about storage in one common storage facility: *Not required.*

Further information about storage conditions: *None.*

Specific end use(s) *No further relevant information available.*

* 8 Exposure controls/personal protection

Additional information about design of technical systems: *No further data; see item 7.*

Control parameters

Components with limit values that require monitoring at the workplace:

56-81-5 glycerol

PEL *Long-term value: 15* 5** mg/m³*
**total dust **respirable fraction*

TLV *TLV withdrawn-insufficient data human occup. exp.*

Additional information: *The lists that were valid during the creation were used as basis.*

Exposure controls

Personal protective equipment:

General protective and hygienic measures:

The usual precautionary measures for handling chemicals should be followed.

Breathing equipment: *Not required.*

Protection of hands: *No chemical-protective gloves required.*

Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

Eye protection: *Goggles recommended during refilling.*

* 9 Physical and chemical properties

Information on basic physical and chemical properties

General Information

Appearance:

Form: *Viscous*

Color: *Opaque*

Odor: *Odorless*

Odour threshold: *Not determined.*

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Important information on protection of health and environment, and on safety.	
pH-value at 20 °C (68 °F):	6
Change in condition	
Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	Undetermined.
Flash point:	Not applicable.
Flammability (solid, gaseous):	Not applicable.
Ignition temperature:	400 °C (752 °F)
Decomposition temperature:	Not determined.
Auto igniting:	Product is not selfigniting.
Danger of explosion:	Product does not present an explosion hazard.
Explosion limits:	
Lower:	0.9 Vol %
Upper:	Not determined.
Vapor pressure at 20 °C (68 °F):	23 hPa (17 mm Hg)
Density at 20 °C (68 °F):	1.6 g/cm ³ (13.352 lbs/gal)
Relative density	Not determined.
Vapour density	Not determined.
Evaporation rate	Not determined.
Solubility in / Miscibility with Water:	Not miscible or difficult to mix.
Partition coefficient (n-octanol/water):	Not determined.
Viscosity:	
Dynamic:	Not determined.
Kinematic:	Not determined.
Solvent content:	
Organic solvents:	30.0 %
Water:	43.8 %
Other information	No further relevant information available.

*10 Stability and reactivity

Reactivity

Chemical stability

Thermal decomposition / conditions to be avoided:

No decomposition if used according to specifications.

Possibility of hazardous reactions No dangerous reactions known.

Conditions to avoid No further relevant information available.

Incompatible materials: No further relevant information available.

Hazardous decomposition products: No dangerous decomposition products known.

*11 Toxicological information

Information on toxicological effects

Acute toxicity:

LD/LC50 values that are relevant for classification:

56-81-5 glycerol

Oral	LD50	12600 mg/kg (rat)
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7447-40-7 potassium chloride		
Oral	LD50	2600 mg/kg (rat)
9004-62-0 Hydroxyethylcellulose		
Oral	LD50	>2000 mg/kg (rat)

Primary irritant effect:

on the skin: No irritant effect.

on the eye: No irritating effect.

Sensitization: No sensitizing effects known.

Additional toxicological information:

The product is not subject to classification according to internally approved calculation methods for preparations:

When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

Carcinogenic categories

IARC (International Agency for Research on Cancer)		
64-17-5	ethanol	1
NTP (National Toxicology Program)		
None of the ingredients is listed.		

***12 Ecological information**

Toxicity

Aquatic toxicity: No further relevant information available.

Persistence and degradability No further relevant information available.

Bioaccumulative potential No further relevant information available.

Mobility in soil No further relevant information available.

Results of PBT and vPvB assessment

PBT: Not applicable.

vPvB: Not applicable.

Other adverse effects No further relevant information available.

13 Disposal considerations

Waste treatment methods

Recommendation: Smaller quantities can be disposed of with household waste.

Uncleaned packagings:

Recommendation: Disposal must be made according to official regulations.

***14 Transport information**

UN-Number DOT, ADR, ADN, IMDG, IATA	Void
UN proper shipping name DOT ADR, ADN, IMDG, IATA	void Void
Transport hazard class(es) DOT, ADR, ADN, IMDG, IATA Class	Void
Packing group DOT, ADR, IMDG, IATA	Void

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Environmental hazards:	
Marine pollutant:	No
Special precautions for user	Not applicable.
Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.
Transport/Additional information:	Not dangerous according to the above specifications.
UN "Model Regulation":	-

*15 Regulatory information

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

Section 355 (extremely hazardous substances):
None of the ingredient is listed.

Section 313 (Specific toxic chemical listings):
None of the ingredients is listed.

TSCA (Toxic Substances Control Act):
56-81-5 glycerol
7447-40-7 potassium chloride
9004-62-0 Hydroxyethylcellulose
7783-90-6 silver chloride
68424-85-1 N-alkyl dimethylbenzyl ammonium chloride
64-17-5 ethanol
7732-18-5 water, distilled or of similar purity

Proposition 65

Chemicals known to cause cancer:
None of the ingredients is listed.

Chemicals known to cause reproductive toxicity for females:
None of the ingredients is listed.

Chemicals known to cause reproductive toxicity for males:
None of the ingredients is listed.

Chemicals known to cause developmental toxicity:
64-17-5 ethanol

Carcinogeny categories

EPA (Environmental Protection Agency)
None of the ingredients is listed.

TLV (Threshold Limit Value established by ACGIH)	
64-17-5 ethanol	A3

MAK (German Maximum Workplace Concentration)	
64-17-5 ethanol	5

NIOSH-Ca (National Institute for Occupational Safety and Health)
None of the ingredients is listed.

OSHA-Ca (Occupational Safety & Health Administration)
None of the ingredients is listed.

Product related hazard informations:

Observe the general safety regulations when handling chemicals.

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Trade name: Standard Gel Sat KCl/AgCl

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The product is not subject to identification regulations according to directives on hazardous materials.

Safety phrases:

29 Do not empty into drains.

National regulations:**Technical instructions (air):**

Class	Share in %
Wasser	43.8
NK	30.0

Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

***16 Other information**

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Department issuing MSDS: PCC - TWSC

Contact:**Abbreviations and acronyms:**

ICAO: International Civil Aviation Organization

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

*** Data compared to the previous version altered.**