HYDRANAL™Buffer for Bases

37859-1L

Version 3.5 Revision Date 06.11.2025 Supersedes 2

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

1.1. Product identifier

Product name	:	HYDRANAL™Buffer for Bases
SDS-number	:	000000020634
Type of product	:	Mixture
Remarks	:	SDS according to Art. 31 of Regulation (EC) 1907/2006.

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

Use of the Substance/Mixture	:	Laboratory chemicals
Uses advised against	:	none

1.3. Details of the supplier of the safety data sheet

Company	:	Honeywell Specialty Chemicals Seelze GmbH Wunstorfer Straße 40 30926 Seelze Germany	Solstice Advanced Materials US, Inc. 115 Tabor Road Morris Plains, NJ 07950-2546 USA
Telephone	:	(49) 5137-999 0	
For further information, please contact:	:	SafetyDataSheet@solstice.com	

1.4. Emergency telephone number

Emergency telephone number	:	+1-703-527-3887 (ChemTrec-Transport) +1 303-739-1378 (Medical)
	:	Poison Control Center: United Kingdom: (+44) 844 892 0111

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

REGULATION (EC) No 1272/2008

Flammable liquids Category 2
H225 Highly flammable liquid and vapour.
Acute toxicity Category 3 - Oral
H301 Toxic if swallowed.
Acute toxicity Category 3 - Inhalation
H331 Toxic if inhaled.
Acute toxicity Category 3 - Dermal
H311 Toxic in contact with skin.
Serious eye damage Category 1
H318 Causes serious eye damage.
Reproductive toxicity Category 2
H361d Suspected of damaging the unborn child.
Specific target organ toxicity - single exposure Category 1
H370 Causes damage to organs.

2.2. Label elements

REGULATION (EC) No 1272/2008

Hazard pictograms :



Signal word : Danger

Hazard statements :	H225	Highly flammable liquid and vapour.
	H301 + H311 + H331	Toxic if swallowed, in contact with skin or if inhaled.
	H318	Causes serious eye damage.
	H361d	Suspected of damaging the unborn child.
	H370	Causes damage to organs.
Precautionary statements :	P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
	P260	Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.
	P280	Wear protective gloves/protective clothing/eye protection/face protection.
	P284	Wear respiratory protection.
	P301 + P330 + P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
	P302 + P352	IF ON SKIN: Wash with plenty of water.
	P304 + P340	IF INHALED: Remove person to fresh

	air and keep comfortable for breathing.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308 + P313	IF exposed or concerned: Get medical advice/ attention.

Hazardous components which must be listed on the label : methanol
salicylic acid

2.3. Other hazards

Do not breathe vapours or spray mist. This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher. The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher. Product does not contain substances that are persistent, mobile, and toxic (PMT/vPvM) at levels of 0.1 % or higher.

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Chemical name	CAS-No. Index-No. EC-No.	Classification 1272/2008	Concentration	Remarks
ethyl alcohol	64-17-5 603-002-00-5 200-578-6	Flam. Liq. 2; H225 Eye Irrit. 2; H319	>= 50 % - <= 70 %	Eye Irrit. 2; H319:>= 50 %
methanol	67-56-1 603-001-00-X	Flam. Liq. 2; H225 Acute Tox. 3; H331;	>= 30 % - < 50 %	

	200-659-6	Inhalation Acute Tox. 3; H311; Dermal Acute Tox. 3; H301; Oral STOT SE 1; H370		STOT SE 1; H370:>= 10 % STOT SE 2; H371:3 - < 10 % STOT SE 1; H370:>= 10 % STOT SE 2; H371:3 - < 10 %
salicylic acid	69-72-7 607-732-00-5 200-712-3	Acute Tox. 4; H302; Oral Eye Dam. 1; H318 Repr. 2; H361d	>= 10 % - < 20 %	
triethylamine	121-44-8 612-004-00-5 204-469-4	Flam. Liq. 2; H225 Acute Tox. 3; H301; Oral Acute Tox. 3; H331; Inhalation Acute Tox. 3; H311; Dermal Skin Corr. 1A; H314 Eye Dam. 1; H318 STOT SE 3; H335	>= 0,1 % - < 1 %	STOT SE 3; H335:>= 1 % STOT SE 3; H335:>= 1 %

Remaining components of this product are non-hazardous and/or are present at concentrations below reportable limits.

Occupational Exposure Limit(s), if available, are listed in Section 8.
For the full text of the H-Statements mentioned in this Section, see Section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General advice:
First aider needs to protect himself. Move out of dangerous area. Take off all contaminated clothing immediately.

Inhalation:
Move to fresh air. Keep patient warm and at rest. Call a physician immediately.

Skin contact:
Wash off immediately with plenty of water. If skin irritation persists, call a physician.

Eye contact:

In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
Protect unharmed eye.

Ingestion:
When swallowed, allow water to be drunk. Do NOT induce vomiting. Call a physician immediately.

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

No data available

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

Treat symptomatically.

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

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:
Water spray
Foam
Carbon dioxide (CO2)
Dry powder

Extinguishing media which shall not be used for safety reasons:
Do not use a solid water stream as it may scatter and spread fire.

5.2. Special hazards arising from the substance or mixture

Flammable.
Vapours may form explosive mixtures with air.
Vapours are heavier than air and may spread along floors.
Vapors may travel to areas away from work site before igniting/flashing back to vapor source.
In case of fire hazardous decomposition products may be produced such as:
Carbon monoxide
Carbon dioxide (CO2)

5.3. Advice for firefighters

In the event of fire, wear self-contained breathing apparatus.
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Evacuate personnel to safe areas. Wear personal protective equipment. Unprotected persons must be kept away. Ensure adequate ventilation. Remove all sources of ignition.

6.2. Environmental precautions

Should not be released into the environment.

6.3. Methods and materials for containment and cleaning up

Soak up with inert absorbent material.
Pick for disposal in tightly closed containers

6.4. Reference to other sections

For personal protection see section 8.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling:
Wear personal protective equipment. Use only in well-ventilated areas.

Advice on protection against fire and explosion:
Keep away from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge. The heavy vapours can overcome a considerable distance up to the source of ignition. Vapours may form explosive mixtures with air.

Hygiene measures:
Take off all contaminated clothing immediately. Remove and wash contaminated clothing before re-use. Wash hands before breaks and at the end of workday. When using do not eat or drink.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers:
Keep only in the original container, tightly closed, in a well ventilated place. Store at room temperature. (Ambient temperature: > 0 < 35°C) Protect from atmospheric moisture and water.

7.3. Specific end use(s)

no additional data available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits:

Components	Basis / Value type	Value / Form of exposure	Exceeding Factor	Remarks
ethyl alcohol	EH40 WEL TWA	1.920 mg/m3 1.000 ppm		
methanol	EU ELV TWA	260 mg/m3 200 ppm		Indicative
methanol	EH40 WEL STEL	333 mg/m3 250 ppm	15 minutes	
methanol	EH40 WEL SKIN_DES			Can be absorbed through the skin.
methanol	EH40 WEL TWA	266 mg/m3 200 ppm		
methanol	EU ELV SKIN_DES			Can be absorbed through the skin.

triethylamine	EH40 WEL			Listed
triethylamine	EU ELV TWA	8,4 mg/m3 2 ppm		Indicative
triethylamine	EU ELV STEL	12,6 mg/m3 3 ppm		Indicative
triethylamine	EU ELV SKIN_DES			Can be absorbed through the skin.
triethylamine	EH40 WEL TWA	8 mg/m3 2 ppm		
triethylamine	EH40 WEL STEL	17 mg/m3 4 ppm	15 minutes	
triethylamine	EH40 WEL SKIN_DES			Can be absorbed through the skin.

EH40 WEL - UK. EH40 Workplace Exposure Limits (WELs), as amended
TWA - Time weighted average
EH40 WEL - UK. EH40 Workplace Exposure Limits (WELs), as amended
STEL - Short term exposure limit
EH40 WEL - UK. EH40 Workplace Exposure Limits (WELs), as amended
SKIN_DES - Skin designation:
EH40 WEL - UK. EH40 Workplace Exposure Limits (WELs), as amended
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DNEL/ PNEC-Values

Component	End-use/impact	Exposure duration	Value	Exposure routes	Remarks
ethyl alcohol	Workers / Acute local effects		1900 mg/m3	Inhalation	
ethyl alcohol	Workers / Long-term systemic effects		343mg/kg bw/d	Skin contact	
ethyl alcohol	Workers / Long-term systemic effects		950 mg/m3	Inhalation	
ethyl alcohol	Consumers / Long-term systemic effects		114 mg/m3	Inhalation	

ethyl alcohol	Consumers / Acute local effects		950 mg/m3	Inhalation	
ethyl alcohol	Consumers / Long-term systemic effects		206mg/kg bw/d	Skin contact	
ethyl alcohol	Consumers / Long-term systemic effects		87mg/kg bw/d	Ingestion	
methanol	Consumers / Acute systemic effects		4mg/kg bw/d	Skin contact	
methanol	Workers / Acute systemic effects		20mg/kg bw/d	Skin contact	
methanol	Consumers / Long-term systemic effects		4mg/kg bw/d	Skin contact	
methanol	Workers / Long-term systemic effects		20mg/kg bw/d	Skin contact	
methanol	Consumers / Acute local effects		26 mg/m3	Inhalation	
methanol	Workers / Acute local effects		130 mg/m3	Inhalation	
methanol	Consumers / Acute systemic effects		26 mg/m3	Inhalation	
methanol	Workers / Acute systemic effects		130 mg/m3	Inhalation	
methanol	Consumers /		26 mg/m3	Inhalation	

	Long-term local effects				
methanol	Workers / Long-term local effects		130 mg/m3	Inhalation	
methanol	Consumers / Long-term systemic effects		26 mg/m3	Inhalation	
methanol	Workers / Long-term systemic effects		130 mg/m3	Inhalation	
methanol	Consumers / Acute systemic effects		4mg/kg bw/d	Ingestion	
methanol	Consumers / Long-term systemic effects		4mg/kg bw/d	Ingestion	
salicylic acid	Workers / Long-term systemic effects		4,48 mg/m3	Inhalation	
salicylic acid	Workers / Long-term systemic effects		1,06mg/kg bw/d	Skin contact	
salicylic acid	Consumers / Long-term systemic effects		0,79 mg/m3	Inhalation	
salicylic acid	Consumers / Long-term systemic effects		0,38mg/kg bw/d	Skin contact	
salicylic acid	Consumers / Long-term systemic effects		0,23mg/kg bw/d	Ingestion	
triethylamine	Workers /		8,4 mg/m3	Inhalation	

	Long-term systemic effects				
triethylamine	Workers / Acute systemic effects		12,6 mg/m3	Inhalation	
triethylamine	Workers / Long-term local effects		8,4 mg/m3	Inhalation	
triethylamine	Workers / Acute local effects		12,6 mg/m3	Inhalation	
triethylamine	Workers / Long-term systemic effects		12,1mg/kg bw/d	Skin contact	

Component	Environmental compartment / Value	Remarks
ethyl alcohol	Fresh water: 0,96 mg/l	
ethyl alcohol	Marine water: 0,79 mg/l	
ethyl alcohol	Fresh water sediment: 3,6 mg/kg	
ethyl alcohol	Soil: 0,63 mg/kg	
methanol	Sewage treatment plant: 100 mg/l	
methanol	Fresh water: 20,8 mg/l	Assessment factor: 10
methanol	Marine water: 2,08 mg/l	Assessment factor: 100
methanol	Fresh water sediment: 77 mg/kg	
methanol	Marine sediment: 7,7 mg/kg	
methanol	Soil: 100 mg/kg	Assessment factor: 100
salicylic acid	Fresh water: 0,2 mg/l	Assessment factor: 50
salicylic acid	Marine water: 0,02 mg/l	Assessment factor: 500

salicylic acid	Sewage treatment plant: 162 mg/l	
salicylic acid	Fresh water sediment: 1,42 mg/kg dw	
salicylic acid	Marine sediment: 0,142 mg/kg dw	
salicylic acid	Soil: 0,166 mg/kg dw	
triethylamine	Fresh water: 0,11 mg/l	Assessment factor: 10
triethylamine	Marine water: 0,011 mg/l	Assessment factor: 100
triethylamine	Sewage treatment plant: 100 mg/l	Assessment factor: 10
triethylamine	Fresh water sediment: 1,575 mg/kg dw	
triethylamine	Marine sediment: 0,158 mg/kg dw	
triethylamine	Soil: 0,25 mg/kg dw	

8.2. Exposure controls

Occupational exposure controls

The Personal Protective Equipment must be in accordance with EN standards:respirator EN 136, 140, 149; safety glasses EN 166; protective suit: EN 340, 463, 468, 943-1, 943-2; gloves EN 374, 511; safety shoes EN-ISO 20345.
Do not breathe vapours or spray mist.

Engineering measures
Use with local exhaust ventilation.
Prevent vapour buildup by providing adequate ventilation during and after use.

Personal protective equipment
Respiratory protection:
In case of insufficient ventilation wear suitable respiratory equipment.

Hand protection:
Glove material: butyl-rubber
Break through time: > 480 min

Glove thickness: 0,7 mm
Butoject® 898
Gloves must be inspected prior to use.
Replace when worn.
Remarks:Supplementary note: The specifications are based on information and tests from similar substances by analogy.
Due to varying conditions (e.g.temperature or other strains) it must be considered that the usage of a chemical protective glove in practice may be much shorter than the permeation time determined in accordance with EN 374.
Since actual conditions of practical use often deviate from standardised conditions according EN 374 the glove manufacturer reccomends to use the chemical protective glove in practice not longer than 50% of the recomended permeation time.
Manufacturer´s directions for use should be observed because of great diversity of types .
Suitable gloves tested according EN 374 are supplied e.g. from KCL GmbH, D-36124 Eichenzell, Vertrieb@kcl.de

Eye protection:
Safety goggles

Skin and body protection:
Protective suit

Environmental exposure controls

Handle in accordance with local environmental regulations and good industrial practices.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

(a) Physical state	:	liquid
(b) Colour	:	colourless
(c) Odour	:	characteristic
(d) Melting point/freezing point	:	No data available
(e) Boiling point/boiling range	:	68 °C at 1.013 hPa
(h) Flash point	:	11 °C

(i) Auto-ignition temperature	:	No data available
(j) Decomposition temperature	:	No decomposition if used as directed.
(k) pH	:	No data available
(l) Viscosity, kinematic	:	No data available
(m) Solubility(ies)	:	Water solubility: completely miscible
(n) Partition coefficient: n-octanol/water	:	No data available
(o) Vapour pressure	:	No data available
(p) Density and / or relative density	:	0,86 g/cm3 at 20 °C
(q) Relative vapour density	:	No data available
(r) Particle characteristics	:	No data available

9.2 Other Information

Polymer characteristics	:	No data available
Evaporation rate	:	No data available
Viscosity, dynamic	:	No data available

SECTION 10: Stability and reactivity

10.1. Reactivity

Stable under recommended storage conditions.

10.2. Chemical stability

No decomposition if used as directed.

10.3. Possibility of hazardous reactions

Vapours may form explosive mixture with air.
Hazardous polymerisation does not occur.

10.4. Conditions to avoid

Heat, flames and sparks.
Protect from moisture.

10.5. Incompatible materials

Oxidizing agents
Strong bases
Acids
Alkali metals
Acid chlorides
Acid anhydrides
Reducing agents

10.6. Hazardous decomposition products

In case of fire hazardous decomposition products may be produced such as:
Carbon monoxide
Carbon dioxide (CO2)

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

(a) Acute toxicity

Acute oral toxicity:
Acute toxicity estimate
Value: 286,27 mg/kg
Method: Calculation method

Acute dermal toxicity:
Acute toxicity estimate

Value: 914,63 mg/kg
Method: Calculation method

Acute inhalation toxicity:
Acute toxicity estimate
Value: 9,15 mg/l
Exposure time: 4 h
Method: Calculation method

Acute toxicity (other routes of administration):
No data available

(b) Skin corrosion/irritation:
No data available

(c) Serious eye damage/eye irritation:
No data available

(d) Respiratory or skin sensitisation:
No data available

(h) STOT-single exposure:
No data available

(i) STOT - repeated exposure:
No data available

(j) Aspiration hazard:
No data available

11.2. Information on other hazards

Endocrine disrupting properties
The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Other information:
There is no data available for this product.

SECTION 12: Ecological information

12.1. Toxicity

Toxicity to fish:
No data available

Toxicity to aquatic plants:
No data available

Toxicity to aquatic invertebrates:
No data available

12.2. Persistence and degradability

No data available

12.3. Bioaccumulative potential

No data available

12.4. Mobility in soil

No data available

12.5. Results of PBT and vPvB assessment

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.
Product does not contain substances that are persistent, mobile, and toxic (PMT/vPvM) at levels of 0.1 % or higher.

12.6. Endocrine disrupting properties

The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

12.7. Other adverse effects

There is no data available for this product.
The product should not be allowed to enter drains, water courses or the soil.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product:
Dispose according to legal requirements.

Packaging:
Legal requirements are to be considered in regard of reuse or disposal of used packaging materials

Further information:
Provisions relating to waste:
EC Directive 2006/12/EC; 2008/98/EEC
Regulation No. 1013/2006
For personal protection see section 8.

SECTION 14: Transport information

14.1 UN number or ID number
ADR/RID:1992 IMDG:1992 IATA:1992

14.2 UN proper shipping name
ADR/RID:FLAMMABLE LIQUID, TOXIC, N.O.S.(METHANOL, ETHANOL)
IMDG:FLAMMABLE LIQUID, TOXIC, N.O.S.(METHANOL,ETHANOL)
IATA:Flammable liquid, toxic, n.o.s.(Methanol, Ethanol)

14.3 Transport hazard class(es)
ADR/RID:3 (6.1) IMDG: 3 (6.1) IATA: 3 (6.1)

14.4 Packaging group
ADR/RID:II IMDG: II IATA: II

14.5 Environmental hazards
ADR/RID:no Marine pollutant: no

14.6 Special precautions for user
IMDG Code segregation group according chapter 3.1.4.4 : NONE,

14.7 Maritime transport in bulk according to IMO instruments

No data available

SECTION 15: Regulatory information

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

Basis	Value	Remarks
Directive 2012/18/EC SEVESO III Listed in Regulation : P5c: FLAMMABLE LIQUIDS Number in Regulation: 1.2.5.3	**Quantity**: 5.000.000 kg **Quantity**: 50.000.000 kg	
Directive 2012/18/EC SEVESO III Listed in Regulation : H2: ACUTE TOXIC Number in Regulation: 1.1.2	**Quantity**: 50.000 kg **Quantity**: 200.000 kg	
Regulation (EC) No. 1907/2006, Annex XVII		This product contains an ingredient according to Annex XVII of the REACH Regulation1907/2006/EC.
Substances of very high concern (SVHC)		This product does not contain substances of very high concern according to Regulation (EC) No Article 57 above the respective regulatory 1907/2006 (REACH), concentration limit of ≥ 0.1 % (w/w).

Other inventory information

USA. List of Active Substances on the Toxic Substances Control Act (TSCA) Chemical Substances Inventory, as amended
On TSCA Inventory

Australia. Inventory of Industrial Chemicals (AIIC), as amended
On the inventory, or in compliance with the inventory

Canada. Domestic Substances List (DSL), as amended
All components of this product are on the Canadian DSL

Japan. Kashin-Hou Law List
On the inventory, or in compliance with the inventory

Korea. Existing Chemicals Inventory (KECI)
On the inventory, or in compliance with the inventory

Philippines. Inventory of Chemicals and Chemical Substances (PICCS)
On the inventory, or in compliance with the inventory

China. Inventory of Existing Chemical Substances (IECSC)
On the inventory, or in compliance with the inventory

New Zealand. Inventory of Chemicals (NZIoC), as published by ERMA New Zealand
On the inventory, or in compliance with the inventory

Taiwan Chemical Substance Inventory (TCSI)
On the inventory, or in compliance with the inventory

15.2 Chemical safety assessment

A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

Text of H-statements referred to under heading 3

ethyl alcohol	:	H225	Highly flammable liquid and vapour.
		H319	Causes serious eye irritation.
methanol	:	H225	Highly flammable liquid and vapour.
		H331	Toxic if inhaled.
		H311	Toxic in contact with skin.
		H301	Toxic if swallowed.
		H370	Causes damage to organs.
salicylic acid	:	H302	Harmful if swallowed.
		H318	Causes serious eye damage.
		H361d	Suspected of damaging the unborn child.

triethylamine	:	H225	Highly flammable liquid and vapour.
		H301	Toxic if swallowed.
		H331	Toxic if inhaled.
		H311	Toxic in contact with skin.
		H314	Causes severe skin burns and eye damage.
		H318	Causes serious eye damage.
		H335	May cause respiratory irritation.

Further information

All directives and regulations refer to amended versions.
Vertical lines in the left hand margin indicate a relevant amendment from the previous version.

Abbreviations:
EC European Community
CAS Chemical Abstracts Service
DNEL Derived no effect level
PNEC Predicted no effect level
vPvB Very persistent and very biaccumulative substance
PBT Persistent, bioaccmulative und toxic substance

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