

SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1 Product identifiers**

Product Name : Solubility & Stability Screen™
Product Number : HR2-072
Product type : Liquid
REACH No. : A registration number is not available for this substance as the substance or its uses are exempted from registration, the annual tonnage does not require a registration or the registration is envisaged for a later registration deadline.

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

Identified uses : For research use only. Not for drug, household, or other use.

1.3 Details of the supplier of the Safety Data Sheet

Company : Hampton Research
34 Journey
Aliso Viejo, CA 92656-3317
United States
Telephone : 949 425 1321
Telephone technical support is available 8:00 a.m. to 4:30 p.m. USA Pacific Standard Time.
Fax : 949 425 1611
Fax Technical Support is available 24 hours a day.
e-mail : tech@hrmail.com
e-mail Technical Support is available 24 hours a day.

1.4 Emergency telephone number

Emergency phone : 949 425 1321
For **CHEMTREC** Assistance : 800 424 9300
For **CHEMTREC** Assistance : 703 527 3887 (International)

SECTION 2: Hazards Identification**2.1 Classification of the substance or mixture**

Classification according to Regulation (EC) No 1272/2008 [EU-GHS/CLP]

see SECTION 16

Classification according to EU Directives 67/548/EEC or 1999/45/EC

see SECTION 16

Additional information:

Relevant R-phrase(s), S-phrase(s), GHS pictogram(s), Hazard statement(s), and Precautionary statement(s) please see SECTION 16

(CONTINUED) - SECTION 2: Hazards Identification

2.2 Label elements

Hazard pictogram	: Not applicable
Signal word	: Not applicable
Hazard statement(s)	: Not applicable
Precautionary statement(s)	: Not applicable
Supplemental Hazard Statements	: Not applicable

2.3 Other hazards : none

SECTION 3: Composition/information on ingredients

Refer to Section 16

SECTION 4: First Aid Measures

4.1 Description of first aid measures

General Advice

Consult a physician. Show this safety data sheet to the doctor in attendance.

If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

4.2 Most important symptoms and effects, both acute and delayed

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated

4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician

Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

Specific treatments

No specific treatment.

SECTION 5: Fire Fighting Measures

5.1 Extinguishing media

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Unsuitable extinguishing media

None known

5.2 Special hazards arising from the substance or mixture

No data available

5.3 Advice for firefighters

Wear self contained breathing apparatus for fire fighting if necessary.

5.4 Further Information

No data available

SECTION 6: Accidental Release Measures

6.1 Personal Precautions

Use personal protective equipment. Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Avoid breathing dust.

6.2 Environmental precautions

Do not let product enter drains.

6.3 Methods and materials for containment and cleaning up

Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

For disposal see SECTION 8 and 13.

SECTION 7: Handling and Storage

7.1 Personal Precautions

Avoid contact with skin and eyes. Avoid formation of dust and aerosols.

Provide appropriate exhaust ventilation at places where dust is formed.

See Section 8 for additional information on hygiene measures. For precautions see section 16.

7.2 Conditions for safe storage, including any incompatibilities

Store in cool place. Keep container tightly closed in a dry and well-ventilated place.

Containers which are opened must be carefully resealed and kept upright to prevent leakage.

7.3 Specific end uses

A part from the uses mentioned in section 1.2 no other specific uses are stipulated.

SECTION 8: Exposure Controls/Personal Protection

8.1 Control parameters

Components with workplace control parameters

Consult a physician. Show this safety data sheet to the doctor in attendance.

8.2 Exposure controls

Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Personal protective equipment

Eye/face protection

Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Body Protection

Impervious clothing, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

For nuisance exposures use type P95 (US) or type P1 (EU EN 143) particle respirator. For higher level protection use type OV/AG/P99 (US) or type ABEK-P2 (EU EN 143) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Environmental Exposure Controls

See SECTION 6

SECTION 9: Physical and Chemical Properties

No data available

SECTION 10: Stability and Reactivity

10.1 Reactivity

No data available

10.2 Chemical stability

No data available

10.3 Possibility of hazardous reactions

No data available

(CONTINUED) - SECTION 10: Stability and Reactivity

10.4 Conditions to avoid

No data available

10.5 Incompatible materials

No data available

10.6 Hazardous decomposition products

Other decomposition products - no data available

SECTION 11: Toxicological Information

Refer to Section 16

SECTION 12: Ecological Information

Refer to Section 16

SECTION 13: Disposal Considerations

13.1 Waste treatment methods

Product

Offer surplus and non-recyclable solutions to a licensed disposal company. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

Contaminated packaging

Dispose of as unused product.

SECTION 14: Transportation Information

14.1 UN number

ADR/RID: 3316

IMDG: 3316

IATA: 3316

14.2 UN proper shipping name

ADR/RID: CHEMICAL KIT

IMDG: CHEMICAL KIT

IATA: Chemical kit

14.3 Transport hazard class(es)

ADR/RID: -

IMDG: -

IATA: -

14.4 Packaging group

ADR/RID: -

IMDG: -

IATA: -

14.5 Environmental hazards

ADR/RID: No

IMDG Marine pollutant: No

IATA: No

(CONTINUED) - SECTION 14: Transportation Information**14.6 Special precautions for user**

No data available

SECTION 15: Regulatory Information

This safety data sheet complies with the requirements of Regulation (EC) No 1907/2006.

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

No data available

15.2 Chemical Safety Assessment

No data available

SECTION 16: Other Information

Kit Components							
Substance Name	[CAS]	R-Phrase	S-Phrase	GHS Pictogram	Hazard Statement	Precautionary Statement	WKG
1,2-Propanediol	57-55-6						1
1-Butyl-3-methylimidazolium chloride	79917-90-1	2536/37/38-51/53	26-45-61	GHS06, GHS09	H301-H315-H319-H335-H411	P261-P273-P301 + P310-P305 + P351 + P338	3
1-Ethyl-3-methylimidazolium acetate	143314-17-4						3
2-Hydroxypropyl)- β -cyclodextrin	128446-35-5						3
4-Aminobutyric acid (GABA)	56-12-2	36/37/38	26-36	GHS07	H315-H319-H335	P261-P305 + P351 + P338	2
5-Aminovaleric acid	660-88-8						3
6-Aminohexanoic acid	60-32-2	36/37/38	26-36	GHS07			2
6-O- α -D-Maltosyl- β -cyclodextrin	104723-60-6	40					3
α -Cyclodextrin	10016-20-3						3
β -Alanine	107-95-9						3
β -Cyclodextrin	7585-39-9						2
Acetamide	60-35-5	40	36/37	GHS08	H351	P281	1
Adipic acid	124-04-9	41	26-39	GHS05	H318	P280-P305 + P351 + P338	1
Ammonium acetate	631-61-8						
Ammonium chloride	12125-02-9	22-36	22	GHS07	H302-H319	P305 + P351 + P338	1
Ammonium sulfate	7783-20-2				H412		1
Benzamidinium hydrochloride	1670-14-0	36/37/38	26-36	GHS07	H315-H319-H335		3
Betaine monohydrate	590-47-6						1
Cadmium chloride hydrate	654054-66-7	45-46-60-61-25-26-48/23/25-50/53	53-45-60-61	GHS06, GHS08, GHS09	H301-H330-H340-H350-H360FD-H372-H410	P201-P260-P273-P284-P301 + P310-P310	3
Calcium chloride dihydrate	10035-04-8	36	22-24	GHS07	H319	P305 + P351 + P338	1
Cesium chloride	14586-35-7						2
Cholin acetate							3

(CONTINUED) - SECTION 16: Other Information

Kit Components							
Substance Name	[CAS]	R-Phrase	S-Phrase	GHS Pictogram	Hazard Statement	Precautionary Statement	WKG
Cholin acetate							3
Cobalt(II) chloride hexahydrate	7791-13-1	49-60-22-42/43-50/53-68	53-45-60-61	GHS07, GHS08, GHS09	H302-H317-H334-H341-H350i-H360F-H410	P201-P261-P273-P280-P308 + P313-P501	3
D-(+)-Trehalose dihydrate	6138-23-4						2
DL-Malic acid	6915-15-7	22-37/38-41	26-36/39	GHS05, GHS07	H302-H315-H318-H335	P261-P280-P305 + P351 + P338	3
D-Sorbitol	50-70-4						nwg
Ethylammonium nitrate	22113-86-6	36/37/38	24/25 37/39 28,2				
Ethylene glycol	107-21-1	22		GHS07	H302		1
Ethylenediamine dihydrochloride	333-18-6	22-36/37/38-42/43	22-26-36/37-45	GHS07, GHS08	H302-H315-H317-H319-H334-H335	P261-P280-P305 + P351 + P338-P342 + P311	2
Ethylenediaminetetraacetic acid disodium salt dihydrate	6381-92-6						2
Formamide	75-12-7	61-40-48/22	53-36/37-45	GHS08	H351-H360D-H373	P201-P281-P308 + P313	1
Gadolinium(III) chloride hexahydrate	13450-84-5	36/37/38	26-36	GHS07	H315-H319-H335	P261-P305 + P351 + P338	3
Glutaric acid	110-94-1	36	26	GHS07	H319	P305 + P351 + P338	1
Glycerol	56-81-5						1
Glycine	56-40-6						1
Gly-gly	556-50-3	36	26		H319	P305 + P351 + P338	3
Gly-gly-gly	556-33-2						3
GSH (L-Glutathione reduced)	70-18-8						2
GSSG (L-Glutathione oxidized)	27025-41-8						2
Guanidine hydrochloride	50-01-1	22-36/38	22	P305 + P351 + P338	H302-H315-H319		2
Hydroxyectoine	165542-15-4	36/37/38	26-36	P261-P305 + P351 + P338	H315-H319-H335		1
Hypotaurine	300-84-5	36/37/38	26-36	P261-P305 + P351 + P338	H315-H319-H335		3
L-Argininamide dihydrochloride	14975-30-5	20/21/22-39/23/24/25	36/37	GHS07, GHS08	H302-H370	P260-P307 + P311	1
L-Arginine	74-79-3						1
L-Arginine ethyl ester dihydrochloride	36589-29-4						3
L-Glutamic acid	56-86-0						1
L-Histidine	71-00-1						
Lithium chloride	7447-41-8	22-36/37/38	26-36/37/39	GHS07	H302-H315-H319-H335	P261-P305 + P351 + P338	3
Lithium citrate tribasic tetrahydrate	6080-58-6	36/37/38	26-36	GHS07	H315-H319-H335	P261-P305 + P351 + P338	1
Lithium nitrate	7790-69-4	8	24/25	GHS03	H272	P220	1
L-Proline	147-85-3						1

(CONTINUED) - SECTION 16: Other Information

Kit Components							
Substance Name	[CAS]	R-Phrase	S-Phrase	GHS Pictogram	Hazard Statement	Precautionary Statement	WKG
L-Serine	56-45-1						
Magnesium chloride hexahydrate	7791-18-6						1
Magnesium sulfate hydrate	22189-08-8						1
Methyl- α -D-glucopyranoside	97-30-3						3
Methyl- β -cyclodextrin	128446-36-6						3
N-Ethylurea	625-52-5						3
N-Methylformamide	123-39-7	61-21	53-45	GHS07, GHS08	H312-H360	P201-P280-P308 + P313	1
N-Methylurea	598-50-5						3
Non Detergent Sulfobetaine 195 (NDSB-195)	160255-06-1	34	26-36/37/39-45	GHS05	H314	P280-P305 + P351 + P338-P310	3
Non Detergent Sulfobetaine 201 (NDSB-201)	15471-17-7						3
Non Detergent Sulfobetaine 211 (NDSB-211)	38880-58-9	34	26-36/37/39-45	GHS05	H314	P280-P305 + P351 + P338-P310	3
Non Detergent Sulfobetaine 221 (NDSB-221)	160788-56-7	34	26-36/37/39-45	GHS05	H314	P280-P305 + P351 + P338-P310	1
Non Detergent Sulfobetaine 256 (NDSB-256)	81239-45-4						3
Oxalic acid dihydrate	6153-56-6	21/22	24/25		H302-H312	P280	1
Pentaerythritol ethoxylate (15/4 EO/OH)	30599-15-6						3
Polyethylene glycol 200	25322-68-3						1
Polyethylene glycol 3,350	25322-68-3						1
Polyethylene glycol 8,000	25322-68-3						1
Polyethylene glycol monomethyl ether 1,900	9004-74-4						1
Polyethylene glycol monomethyl ether 550	9004-74-4						1
Polyethylene glycol monomethyl ether 750	9004-74-4						1
Polypropylene glycol P 400	25322-69-4						1
Polyvinylpyrrolidone K15	9003-39-8						
Potassium chloride	7447-40-7						1
Potassium phosphate dibasic	7758-11-4						1
Potassium thiocyanate	333-20-0	20/21/22-32-52/53	13-36/37-46-61	GHS07			1
Sodium benzenesulfonate	515-42-4	36/37/38	26	GHS07	H315-H319-H335	P261-P305 + P351 + P338	3
Sodium bromide	7647-15-6				H303+H313, H320	P305+P351+P338	1
Sodium chloride	7647-14-5						1
Sodium malonate	141-82-2						3
Sodium phosphate monobasic monohydrate	10049-21-5						1
Sodium p-toluenesulfonate	657-84-1						1
Sodium sulfate decahydrate	7727-73-3						1

(CONTINUED) - SECTION 16: Other Information

Kit Components							
Substance Name	[CAS]	R-Phrase	S-Phrase	GHS Pictogram	Hazard Statement	Precautionary Statement	WKG
Spermidine	124-20-9	34	26-36/37/39-45				1
Spermine tetrahydrochloride	306-67-2	36/38	26-36	GHS07	H315-H319	P305 + P351 + P338	3
Succinic acid	110-15-6	41	26-39	GHS05	H318	P280-P305 + P351 + P338	1
Sucrose	57-50-1						2
Tacsimate pH 7.0							
Taurine	107-35-7	36/37/38	26-36	GHS07	H315-H319-H335	P261-P305 + P351 + P338	2
TCEP hydrochloride	51805-45-9	34	26-27-36/37/39	GHS05	H314	P280-P305 + P351 + P338-P310	2
Tetraethylammonium bromide	71-91-0	36/37/38	26-36	GHS07	H315-H319-H335	P261-P305 + P351 + P338	3
Trichloroacetic acid	76-03-9	35-50/53	26-36/37/39-45-61	GHS05, GHS07, GHS09	H314-H335-H410	P261-P273-P280-P305 + P351 + P338-P310-P501	2
Triethylene glycol	112-27-6	37	1	GHS07	H335	P261	1
Trimethylamine N-oxide dihydrate	62637-93-8	36/38	26-36	GHS07	H315-H319	P305 + P351 + P338	2
Tryptone	91079-40-2						3
Urea	57-13-6						1
Xylitol	87-99-0						2

For additional information, please refer to the individual Material Safety Data Sheets(s).

Relevant R-phrase(s), S-phrase(s), GHS Pictogram(s), Hazard statement(s), and Precautionary statement(s)
Risk Phrase(s)

- R 8 : Contact with combustible material may cause fire
- R 20/21/22 : Harmful by inhalation, in contact with skin and if swallowed
- R 21 : Harmful in contact with skin
- R 22 : Harmful if swallowed
- R 21/22 : Harmful in contact with skin and if swallowed
- R 25 : Toxic if swallowed
- R 26 : Very Toxic by inhalation
- R 32 : Contact with acids liberates very toxic gas
- R 34 : Causes burns
- R 35 : Causes severe burns
- R 36 : Irritating to the eyes
- R 36/38 : Irritating to eyes and skin
- R 36/37/38 : Irritating to eyes, respiratory system and skin
- R 37 : Irritating to the respiratory system
- R 37/38 : Irritating to respiratory system and skin
- R 39/23/24/25 : Toxic: danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed
- R 40 : Limited evidence of a carcinogenic effect
- R 41 : Risk of serious damage to eyes
- R 42/43 : May cause sensitization by inhalation and skin contact
- R 45 : May cause cancer

(CONTINUED) - SECTION 16: Other Information

Relevant R-phrases, S-phrases, GHS Pictogram(s), Hazard statement(s), and Precautionary statement(s) (CONTINUED) - Risk Phrase(s)

- R 46 : May cause heritable genetic damage
R 48/22 : Harmful: danger of serious damage to health by prolonged exposure if swallowed
R 48/23/25 : Toxic: danger of serious damage to health by prolonged exposure through inhalation and if swallowed
R 49 : May cause cancer by inhalation
R 50/53 : Very toxic to aquatic organisms, may cause long term adverse effects in the aquatic environment
R 52/53 : Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment
R 51/53 : Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment
R 61 : May cause harm to the unborn child
R 68 : Possible risk of irreversible effects

Safety Phrase(s)

- S 13 : Keep away from food, drink and animal feeding stuffs
S 22 : Do not breathe dust
S 24/25 : Avoid contact with skin and eyes
S 26 : In case of contact with eyes, rinse immediately with plenty of water and seek medical advice
S 36 : Wear suitable protective clothing and seek medical advice
S 36/37 : Wear suitable protective clothing and gloves
S 36/39 : Wear suitable protective clothing and eye/face protection
S 36/37/39 : Wear suitable protective clothing, gloves and eye/face protection
S 39 : Wear eye/face protection
S 45 : In case of accident or if you feel unwell, seek medical advice immediately (show label where possible)
S 46 : If swallowed, seek medical advice immediately and show this container or label
S 53 : Avoid exposure - obtain special instruction before use
S 60 : This material and/or its container must be disposed of as hazardous waste
S 61 : Avoid release to the environment. Refer to special instructions safety data sheet

GHS Pictogram

- | | | | |
|-------|---|-------|---|
| GHS03 |  | GHS07 |  |
| GHS05 |  | GHS08 |  |
| GHS06 |  | GHS09 |  |

Hazard statement(s)

- H272 : May intensify fire; oxidizer.
H301 : Toxic if swallowed.
H302 : Harmful if swallowed.
H312 : Harmful in contact with skin.
H314 : Causes severe skin burns and eye damage.
H315 : Causes skin irritation.
H317 : May cause an allergic skin reaction.
H318 : Causes serious eye damage.

(CONTINUED) - SECTION 16: Other Information

Relevant R-phras(e)s, S-phras(e)s, GHS Pictogram(s), Hazard statement(s), and Precautionary statement(s) (CONTINUED) - Hazard statement(s)

- H319 : Causes serious eye irritation.
- H330 : Fatal if inhaled.
- H332 : Harmful if inhaled.
- H334 : May cause allergy or asthma symptoms or breathing difficulties if inhaled.
- H335 : May cause respiratory irritation.
- H340 : May cause genetic defects.
- H341 : Suspected of causing genetic defects.
- H350 : May cause cancer.
- H350i : May cause cancer by inhalation.
- H351 : Suspected of causing cancer.
- H360F : May damage fertility.
- H360D : May damage the unborn child.
- H360FD : May damage fertility. May damage the unborn child.
- H370 : Cause damage to organs.
- H372 : Causes damage to organs through prolonged or repeated exposure.
- H373 : Causes damage to organs through prolonged or repeated exposure.
- H410 : Very toxic to aquatic life with long lasting effects.
- H411 : Toxic to aquatic life with long lasting effect.
- H412 : Harmful to aquatic life with long lasting effects.

Precautionary statement(s)

- P201 : Obtain special instructions before use.
- P220 : Keep/Store away from clothing/.../combustible materials.
- P260 : Do not breathe dust/fume/gas/mist/vapours/spray.
- P261 : Avoid breathing dust/fume/gas/mist/vapours/spray.
- P273 : Avoid release to the environment.
- P280 : Wear protective gloves/protective clothing/eye protection/face protection.
- P281 : Use personal protective equipment as required.
- P284 : Wear respiratory protection.
- P301 + P310 : IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
- P307 + P311 : IF exposed or if you feel unwell: call a POISON CENTER or doctor/physician.
- P308 + P313 : IF exposed or concerned: Get medical advice/attention.
- P310 : Immediately call a POISON CENTER or doctor/physician.
- P305 + P351 + P338 : IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P342 + P311 : IF experiencing respiratory symptoms: call a POISON CENTER or doctor/physician.
- P501 : Dispose of contents/container to a licensed disposal company.

(CONTINUED) - SECTION 16: Other Information

DISCLAIMER

- For R&D use only. Not for drug, household, or other use.

WARRANTY

• The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of this product. Hampton Research Corp., shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale.

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