



DOCUMENT TYPE	SAFETY DATA SHEET
PRODUCT PART NUMBER(S) CITED	0301180 0301186
PRODUCT DESCRIPTION	#3 STANDARDIZING SOLUTION
MANUFACTURER	SCIENTIFIC SOLUTIONS
DATE EFFECTIVE	02/15/19
VERSION	021519-02

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SAFETY DATA SHEET

SECTION 1: IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND OF THE COMPANY / UNDERTAKING

1.1 PRODUCT IDENTIFIER

Product Identifier Name	LabPac [®] #3 Standardizing Solution
Product Identification Number(s)	0301180, 0301186

1.2 RELEVANT IDENTIFIED USES OF THE SUBSTANCE OR MIXTURE AND USES ADVISED AGAINST

Use Recommend	Calibration and Verification of Ionic Contamination Test Systems
Use Not Recommended	No hazardous use known

1.3 DETAILS OF THE SUPPLIER OF THE SAFETY DATA SHEET

Manufacturer / Supplier	Scientific Solutions Inc. 9323 Hamilton Drive Mentor OH 44060 Phone: 440-357-1400 Fax: 440-357-1416 Web: www.Scientific-Solutions.com Email: sales@Scientific-Solutions.com
SDS Contact	Support@Scientific-Solutions.com

1.4 EMERGENCY TELEPHONE NUMBER

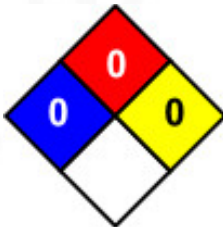
Emergency Telephone Number	00 + 1 + 440 + 357 1400
Hours of operation	9:00 to 17:00 GMT-5
Language of phone service	English

SECTION 2: HAZARDS IDENTIFICATION

2.1 CLASSIFICATION OF THE SUBSTANCE OR MIXTURE

OSHA / HCS Status	Material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200)
EC Status	This product does not meet the criteria for classification in any hazard class according to Regulation (EC) No 1272/2008 on classification, labeling and packaging of substances and mixtures.
Hazard Classification	Not hazardous

2.2 LABEL ELEMENTS

Hazard Pictogram	None. Hazards do not reach threshold required for least severe category								
Signal Word	None. Hazards do not reach threshold required for least severe category								
Hazard Statement(s)	None. No known significant effects or critical hazards								
Precautionary Statements	None. No precautions required								
Supplemental Hazard Information	Not applicable								
HMIS Rating (Scale 0-4)	<table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td style="background-color: blue; color: white;">HEALTH</td> <td style="text-align: right;">0</td> </tr> <tr> <td style="background-color: red; color: white;">FLAMMABILITY</td> <td style="text-align: right;">0</td> </tr> <tr> <td style="background-color: yellow; color: black;">PHYSICAL HAZARD</td> <td style="text-align: right;">0</td> </tr> <tr> <td style="background-color: white; color: black;">PERSONAL PROTECTION</td> <td style="text-align: right;">0</td> </tr> </table>	HEALTH	0	FLAMMABILITY	0	PHYSICAL HAZARD	0	PERSONAL PROTECTION	0
HEALTH	0								
FLAMMABILITY	0								
PHYSICAL HAZARD	0								
PERSONAL PROTECTION	0								
NFPA Rating									

2.3 OTHER HAZARDS

PBT or vPvB Criteria	Refer to section 12.5
Hazards not otherwise classified	None

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS**3.1 SUBSTANCES**

No Data, Product is a mixture

Refer to Section3.2

3.2 MIXTURES

CAS Number	EC NUMBER	IDENTIFIER NAME	WEIGHT % (nominal)	CLASSIFICATION
7732-18-5	215-185-5	Water H2O	99.920 - 99.930	Not Hazardous
7647-14-5	231-598-3	Sodium Chloride NaCl	0.0300 - 0.0400	Not Hazardous
7447-40-7	231-211-8	Potassium Chloride KCl	0.0300 - 0.0400	Not Hazardous
Not Applicable	Not Applicable	Non-Classified Constituent	Max 0.0045	Not Applicable

SECTION 4: FIRST AID MEASURES**4.1 DESCRIPTION OF FIRST AID MEASURES**

Eye Contact	None Required, No evidence of adverse effects
Ingestion	None Required, No evidence of adverse effects
Inhalation	None Required, No evidence of adverse effects
Skin Contact	None Required, No evidence of adverse effects
Self-protection of the first aider	None Required.

4.2 MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED

Systemic & Other Effects	None
Carcinogenicity	Not Applicable, non-carcinogenic
Overexposure Medical Conditions	None currently known
Repeated overexposure effects	No evidence of adverse effects from available information
Other Health Hazards	None currently known

4.3 INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED

Notes to Physician	None required
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SECTION 5: FIREFIGHTING MEASURES**5.1 EXTINGUISHING MEDIA**

Suitable Extinguishing Media	Use an extinguishing agent suitable for the surrounding fire
Unsuitable Extinguishing Media	None Known

5.2 SPECIAL HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE

Hazardous combustion products	None
Flammable Limits In Air (% by Vol)	Non Flammable
Flash Point and Method	Does not flash
Autoignition Temperature	Does not ignite
Unusual Fire & Explosion Hazards	None

5.3 ADVICE FOR FIREFIGHTERS

Special Fire Fighting Procedures	None
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SECTION 6: ACCIDENTAL RELEASE MEASURES**6.1 PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES**

Precautions	None Required
Personal Protective Equipment	None Required
Emergency Procedures	None Required

6.2 ENVIRONMENTAL PRECAUTIONS

Environmental Precautions	None, safe for the environment. The ingredients of the mixture occur in nature. NaCL, the common mineral halite, is dissolved in the ocean at 2.6% concentration. NaCl and KCL are used as a snow antifreeze or deicer on pathways and a seasoning for food.
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6.3 METHODS AND MATERIAL FOR CONTAINMENT AND CLEANING UP

Spill Containment	No special requirement
Spill Clean up	No special procedures Vacuum or mop up. Common absorbents may be used
Other information - Disposal Method	Dispose as non hazardous waste. No special procedure.

6.4 REFERENCES TO OTHER SECTIONS

Reference to Other Sections	None
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SECTION 7: HANDLING AND STORAGE**7.1 PRECAUTIONS FOR SAFE HANDLING**

Safe Handling Dispensing Measures	Recommend using 5ml dispensing syringe, like Scientific Solutions part number 0301199 or similar, to avoid spillage.
Handling with incompatible substances or mixtures.	Do not use or mix with other substances or mixtures that are water reactive.
Property altering risks to avoid	None
Accidental Environment release	Avoid accidental spillage by utilizing a dispensing syringe to draw out the required amount from a stable and stationary container.
General occupational hygiene	Do not eat, drink or smoke in work areas Wash hands before and after use.

7.2 CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES

Storage Procedures	Standard storage procedures are appropriate
Conditions for Storage	Avoid freezing
Other advice	Keep package closed tightly

7.3 SPECIFIC END USE(S)

Recommendations	Chemical verification of ionic test instruments
Industrial Sector Solutions	Circuit board manufacturing / assembly cleanliness process verification

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION**8.1 CONTROL PARAMETERS**

National Exposure Limits	None exist for the mixture or the substances therein
Exposure Control and Limits	No Limits
Monitoring Procedures	None

8.2 EXPOSURE CONTROLS

Appropriate Engineering Controls	None required
Respiratory protection	None required
Eye / Face protection	None required
Hand, skin and body protection	None required
Ventilation	None required
Protective Gloves	None required
Thermal Hazards	None
Environmental Exposure Controls	None required

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES	
Appearance	Clear, colorless, mobile liquid.
Odor	None
Odor Threshold	Odorless substance
pH (nominal)	7
Temperature Freezing/Melting Point	0 °C
Temperature Boiling Point	100 °C
Temperature Flash Point	Does not flash
Evaporation Rate (N-Butyl Acetate = 1):	0.3
Flammability	Not Flammable
Flammability Limits (LFL / UEL)	Not Flammable
Vapor Pressure (torr mm Hg)	23.76 @ 25 °C
Vapor Density	0.622
Relative Density / Specific Gravity	0.997 @ 25 °C
Solubility in Water	Miscible. NaCl / KCL substance is 359g/L H2O
Partition constant coefficient (n-octanol/water)	Not applicable
Temperature Auto-ignition	Does not ignite
Temperature Decomposition	2500 °C
Viscosity:	1 cP @ 20 °C
Explosive Properties	None
Oxidizing Properties	None

9.2 OTHER INFORMATION	
Resistivity (nominal)	1500 µS/cm
Molar mass	18.01528(33) g/mol
Volatiles Percent by Volume	0

SECTION 10: STABILITY AND REACTIVITY**10.1 REACTIVITY**

Reactivity Hazards	Product reacts like H ₂ O in the presence of other substances
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10.2 CHEMICAL STABILITY

Chemical Stability	Stable, no known hazardous reactions
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10.3 POSSIBILITY OF HAZARDOUS REACTIONS

Possibility of Hazardous Reactions	Product reacts like H ₂ O in the presence of other substances
Hazardous Polymerization	Does not occur

10.4 CONDITIONS TO AVOID

Conditions to Avoid	Avoid contact with water reactive chemicals
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10.5 INCOMPATIBLE MATERIALS

Incompatible Materials avoid contact with	No common materials present a hazard
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10.6 HAZARDOUS DECOMPOSITION PRODUCTS

Hazardous decomposition status	Does not decompose when used for intended uses
Hazardous decomposition products	None

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 INFORMATION ON TOXICOLOGICAL EFFECTS	
Acute Toxicology	None
Skin corrosion / irritation	None
Serious Eye Damage / Irritation	None
Respiratory or Skin Sensitization	None
Germ Cell Mutagenicity	None
Carcinogenicity	None
Reproductive Toxicity	None
Specific Target Organ Toxicity - Single Exposure	None
Specific Target Organ Toxicity - Repeated Exposure	None
Aspiration Hazard	None
Oral Toxicity	None
Chronic Effects on Humans:	None
Listed as potential carcinogen: NTP, IRAC, OSHA	No
California Prop. 65 Chemicals	Product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

SECTION 12: ECOLOGICAL INFORMATION**12.1 TOXICITY**

Eco-toxicity including Aquatic toxicity	None
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12.2 PERSISTENCE AND DEGRADABILITY

Persistence and Degradability	This product is inherently biodegradable. The product itself and its products of degradation are not toxic.
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12.3 BIOACCUMULATIVE POTENTIAL

Bioaccumulative potential	None
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12.4 MOBILITY IN SOIL

Mobility	Accidental spillage may lead to penetration in the soil and groundwater. There is no evidence that this would cause any adverse ecological effects.
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12.5 RESULTS OF PBT AND vPvB ASSESSMENT

PBT and vPvB assessment	This mixture does not contain any substances that are assessed to be a PBT or a vPvB
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12.6 OTHER ADVERSE EFFECTS

Other adverse effects	No known significant effects or critical hazards.
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SECTION 13: DISPOSAL CONSIDERATIONS**13.1 WASTE TREATMENT METHODS**

Product Disposal Method	Dispose as non hazardous waste. No special procedure.
Packaging Disposal Method	Waste packaging should be recycled
Properties affecting waste treatment options	None
Sewage Disposal	Waste should not be disposed of by release to sewers
Special Precautions	None

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SECTION 14: TRANSPORT INFORMATION**14.1 UN NUMBER**

Australian: ADGC	Not Regulated
Canadian: TDG	Not Regulated
Europe Road Transport: ECE ADR	Not Regulated
Europe Rail Transport: OCTI RID	Not Regulated
Europe Inland Waterway Transport: ECE ADN	Not Regulated
Global Air Transport: ICAO IATA DGR	Not Regulated
Global Sea Transport: IMO IMDG	Not Regulated
Mexico: NOM	Not Regulated
USA: DOT	Not Regulated
UN	Not Regulated

14.2 UN PROPER SHIPPING NAME

Australian: ADGC	-
Canadian: TDG	-
Europe Road Transport: ECE ADR	-
Europe Rail Transport: OCTI RID	-
Europe Inland Waterway Transport: ECE ADN	-
Global Air Transport: ICAO IATA DGR	-
Global Sea Transport: IMO IMDG CODE	-
Mexico: NOM	-
USA: DOT	-
UN	-

14.3 TRANSPORT HAZARD CLASS(ES)	
Australian: ADGC	-
Canadian: TDG	-
Europe Road Transport: ECE ADR	-
Europe Rail Transport: OCTI RID	-
Europe Inland Waterway Transport: ECE ADN	-
Global Air Transport: ICAO IATA DGR	-
Global Sea Transport: IMO IMDG CODE	-
Mexico: NOM	-
USA: DOT	-
UN	-

14.4 PACKING GROUP	
Australian: ADGC	-
Canadian: TDG	-
Europe Road Transport: ECE ADR	-
Europe Rail Transport: OCTI RID	-
Europe Inland Waterway Transport: ECE ADN	-
Global Air Transport: ICAO IATA DGR	-
Global Sea Transport: IMO IMDG CODE	-
Mexico: NOM	-
USA: DOT	-
UN	-

14.5 ENVIRONMENTAL HAZARDS	
Australian: ADGC	None
Canadian: TDG	None
Europe Road Transport: ECE ADR	None
Europe Rail Transport: OCTI RID	None
Europe Inland Waterway Transport: ECE ADN	None
Global Air Transport: ICAO IATA DGR	None
Global Sea Transport: IMO IMDG CODE	None
Mexico: NOM	None
USA: DOT	None
UN	None

14.6 SPECIAL PRECAUTIONS FOR USER

Australian: ADGC	None
Canadian: TDG	None
Europe Road Transport: ECE ADR	None
Europe Rail Transport: OCTI RID	None
Europe Inland Waterway Transport: ECE ADN	None
Global Air Transport: ICAO IATA DGR	None
Global Sea Transport: IMO IMDG CODE	None
Mexico: NOM	None
USA: DOT	None
UN	None

14.7 TRANSPORT IN BULK ACCORDING TO ANNEX II OF MARPOL AND THE IBC CODE

Transport in bulk according to Annex II of Marpol and the IBC code	This product is provided only in non-bulk containers
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SECTION 15: REGULATORY INFORMATION**15.1 SAFETY, HEALTH AND ENVIRONMENTAL REGULATIONS / LEGISLATIONS SPECIFIC FOR THE SUBSTANCE OR MIXTURE**

TSCA Status (US Toxic Substance Control Act)	All components listed or exempted
CERCLA Status (US EPA Law, Comprehensive Environmental Response, Compensation, and Liability Act)	Not Regulated
SARA Status (US Super-fund Amendments and Reauthorization Act)	Not Regulated
RCRA Status (US EPA, Resource Conversation and Recovery Act)	Not Regulated
PROP 6+5 (US California Proposition 65)	Not Regulated
WHMIS (Canada Workplace Hazardous Materials Information System)	Not Regulated
DSL Status (Canadian Domestic Substances List)	All components listed or exempted
EINECS / ELINCS Status (European INventory of Existing Chemical Substances / European List of Notified Chemical Substances)	All components listed or exempted
AICS Status (Australian Inventory of Chemical Substances)	All components listed or exempted
Other Inventory Lists (Australia, China, Europe, Japan, Malaysia, New Zealand, Philippines, Republic of Korea, Taiwan)	All components listed or exempted
(EC) No. 10005/2009 Ozone Depleting substances	Not Regulated
(EC) No. 850/2004 / Directive 79/117/EEC Persistent Organic Pollutants	Not Regulated
(EC) No. 649/2012 Import/Export of Dangerous Chemicals	Not Regulated

15.2 CHEMICAL SAFETY ASSESSMENT

Chemical Safety Assessment	No Chemical Safety Assessment has been carried out for this substance/mixture.
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SECTION 16: OTHER INFORMATION**16.1 CURRENT VERSION AND REVISIONS**

Current Version	030516-01		
Revision History	DATE	VERSION	COMMENTS
	02/15/19	021519-02	Review, no changes
	02/15/18	021518-02	Review, no changes
	03/15/17	031517-02	Update to 3.2 mixture range, version number and date correction
	01/23/17	012317-01	Compliance review, Spelling corrections(4.2), copyright update
	03/05/16	030516-01	Update for compliance to regulation (EU) No. 2015/830 Annex II
	06/02/15	060215-01	SDS Initial Release
	06/02/15	060215-00	Update to transportation information
	03/12/14	031214-01	Update to shipping information
	12/04/12	120412-01	MSDS Release

16.2 INTELLECTUAL PROPERTY STATEMENTS

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