

## 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

### Product Identifier

**Product Name** Optimum Results™ D Reference Filling Solution

**Product Number(s)** 900063

**Pure substance/mixture** Mixture

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

**Recommended Use** Use as laboratory reagent

**Uses advised against** No Information available

### Manufacturer/Supplier

Thermo Fisher Scientific©  
Water and Lab Products  
22 Alpha Road  
Chelmsford, MA 01824, USA  
1-978-232-6000

**E-mail address** [info.water@thermo.com](mailto:info.water@thermo.com)

**Made in** USA

**Emergency Telephone** 24 Hour Emergency Phone Number  
CHEMTREC®  
Within USA and Canada: 1-800-424-9300  
Outside USA and Canada: 1-703-527-3887  
(collect calls accepted)

**2. HAZARDS IDENTIFICATION**

**Classification**


**OSHA Regulatory Status**

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Carcinogenicity	Category 1B
-----------------	-------------

**Label Elements**

**Emergency Overview**

<b>Danger</b>		
<b>Hazard Statements</b> May cause cancer		
		
<b>Appearance</b> Clear	<b>Physical State</b> Liquid	<b>Odor</b> None

Safety data sheet available on request

**Precautionary Statements**

Do not handle until all safety information has been read and understood.

**Prevention**

Obtain special instructions before use  
Do not handle until all safety precautions have been read and understood  
Use personal protective equipment as required

**Response**

IF exposed or concerned: Get medical attention/advice

**Storage**

Store locked up

**Disposal**

Dispose of contents/container to an approved waste disposal plant

**Hazards not otherwise classified (HNOC)**

No information available

**Other Information**

No information available

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

Component	CAS-No	Weight %	Trade Secret
-----------	--------	----------	--------------

Potassium Nitrate	7757-79-1	10 - 20%	*
-------------------	-----------	----------	---

\*The exact percentage (concentration) of composition has been withheld as a trade secret.

**4. FIRST AID MEASURES**

First aid measures

- General Advice** Use first aid treatment according to the nature of the injury. Get medical attention immediately if symptoms occur. Show this safety data sheet to the doctor in attendance.
- Eye Contact** Rinse thoroughly with plenty of water, also under the eyelids. Obtain medical attention.
- Skin Contact** Wash off immediately with soap and plenty of water for at least 15 minutes while removing all contaminated clothing and shoes. If skin reactions occur, contact a physician.
- Inhalation** Move to fresh air. If breathing is difficult, give oxygen. If symptoms persist, obtain medical attention.
- Ingestion** Clean mouth with water and drink afterwards plenty of water. Do not induce vomiting. Call a physician or Poison Control Center immediately.
- Protection of First-aiders** Use personal protective equipment. See Section 8 for more detail. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.

**Most important symptoms and effects, both acute and delayed**

**Most important symptoms/effects** No information available

**Indication of any immediate medical attention and special treatment needed**

**Notes to Physician** Treat symptomatically

**5. FIRE-FIGHTING MEASURES**

**Suitable Extinguishing Media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Unsuitable Extinguishing Media**

No information available

**Specific Hazards Arising from the Chemical**

No information available

**Explosion Data**

**Sensitivity to Mechanical Impact** None

**Sensitivity to Static Discharge** None

**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** Use personal protective equipment. Refer to Section 8. Evacuate personnel to safe areas.
- Environmental Precautions** Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas.

**Methods and Material for Containment and Cleaning Up**

Methods for Containment Prevent further leakage or spillage if safe to do so.

Methods for Cleaning Up Soak up with inert absorbent material. Pick up and transfer to properly labeled containers.

**7. HANDLING AND STORAGE**

**Precautions for Safe Handling**

Handling To avoid risks to human health and the environment, comply with the instructions for use  
Wear personal protective equipment  
Avoid breathing dust/fume/gas/mist/vapours/spray  
Ensure adequate ventilation, especially in confined areas

**Conditions for Safe Storage, Including any Incompatibilities**

Storage Keep container tightly closed in a dry and well-ventilated place  
Store at room temperature in the original container  
Keep away from direct sunlight

Incompatible Products No information available

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

**Control parameters**

Exposure Guidelines This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

**Appropriate engineering controls**

Engineering Measures Showers  
Eyewash stations  
Ventilation systems

**Individual protection measures, such as personal protective equipment**

Eye/face Protection Wear chemical splash goggles. If splashes are likely to occur, wear: Face-shield.

Skin and Body Protection Wear protective gloves/clothing.

Respiratory Protection None required under normal usage. In case of inadequate ventilation wear respiratory protection.

Hygiene Measures Handle in accordance with good industrial hygiene and safety practice.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

**Information on basic physical and chemical properties**

Physical State Liquid  
Appearance Clear  
Odor None  
Odor Threshold No information available  
pH Range 5.0 - 8.0

Property	Values	Remarks • Method
Melting point/freezing point	No information available	
Boiling Point/Range	~ 100 °C / 212 °F	
Flash Point (High in °C)	N/A	

Evaporation Rate	No information available
Flammability (solid, gas)	No information available
Flammability Limit in Air	
Upper flammability limit:	No information available
Lower flammability limit:	No information available
Vapor pressure	No information available
Vapor Density	No information available
Specific Gravity	No information available
Water Solubility	Soluble in water
Solubility in other solvents	No information available
Partition coefficient	No information available
Autoignition Temperature	
Decomposition Temperature	No information available
Kinematic Viscosity	No information available
Dynamic viscosity	No information available
Explosive Properties	No information available
Oxidizing Properties	No information available

**Other Information**

Softening Point	No information available
Molecular Weight	No information available
VOC Content(%)	No information available
Density	No Information available
Bulk Density	No information available

**10. STABILITY AND REACTIVITY**

**Reactivity**

No Information available

**Chemical Stability**

Stable under normal conditions

**Possibility of Hazardous Reactions**

None under normal processing

**Conditions to Avoid**

Extremes of temperature and direct sunlight

**Incompatible Materials**

No information available

**Hazardous Decomposition Products**

Thermal decomposition can lead to release of irritating gases and vapors

**11. TOXICOLOGICAL INFORMATION**

**Information on likely routes of exposure**

Inhalation	No information available
Eye Contact	No information available
Skin Contact	No information available
Ingestion	No information available

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Potassium Nitrate 7757-79-1	= 3015 mg/kg ( Rat )	-	-

**Information on Toxicological Effects**

**Symptoms** No information available

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

**Sensitization** No information available

**Mutagenic Effects** No information available

**Carcinogenicity** No information available.

**Reproductive Effects** No information available

**STOT - single exposure** No information available

**STOT - repeated exposure** No information available

**Aspiration hazard** No information available

**Numerical measures of toxicity - Product Information**

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

ATEmix (oral) 30150 mg/kg

**12. ECOLOGICAL INFORMATION**

**Ecotoxicity**

10% of the mixture consists of components(s) of unknown hazards to the aquatic environment

**Persistence and Degradability**

No information available

**Bioaccumulation/ Accumulation**

No information available

**Mobility**

No information available.

**Other adverse effects**

No information available

**13. DISPOSAL CONSIDERATIONS**

**Waste treatment methods**

**Waste Disposal Methods** Disposal should be in accordance with applicable regional, national and local laws and regulations.

**Contaminated Packaging** Improper disposal or reuse of this container may be dangerous and illegal.

Component	CAWAST
Potassium Nitrate 7757-79-1	Ignitable Reactive

**14. TRANSPORT INFORMATION**

<u>DOT</u>	Not regulated
<u>TDG</u>	Not regulated
<u>MEX</u>	Not regulated
<u>ICAO</u>	Not regulated
<u>IATA</u>	Not regulated
<u>IMDG/IMO</u>	Not regulated
<u>RID</u>	Not regulated
<u>ADR</u>	Not regulated
<u>ADN</u>	Not regulated

**15. REGULATORY INFORMATION**

International Inventories

<b>USINV</b>	Complies
<b>CANINV</b>	Complies
<b>EINECS/ELINCS</b>	Complies
<b>ENCS</b>	Does not Comply
<b>IECSC</b>	Complies
<b>KECL</b>	Complies
<b>PICCS</b>	Complies
<b>AICS</b>	Complies

**USINV/ TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory  
**CANINV/ DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List  
**EINECS/ELINCS** - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances  
**ENCS** - Japanese Existing and New Chemical Substances  
**IECSC** - Chinese 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

U.S. Federal Regulations

**SARA 313**

Component	SARA 313 - Threshold Values %
Potassium Nitrate - 7757-79-1	1.0

SARA 311/312 Hazardous Categorization

<b>Acute Health Hazard</b>	No
<b>Chronic Health Hazard</b>	No
<b>Fire Hazard</b>	No
<b>Sudden Release of Pressure Hazard</b>	No
<b>Reactive Hazard</b>	No

Clean Water Act

Not applicable

**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). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

**U.S. State Regulations**

**California Proposition 65**

This product does not contain any Proposition 65 chemicals

**State Right-to-Know**

Component	New Jersey	Massachusetts	Pennsylvania
Potassium Nitrate 7757-79-1	X	X	X

**U.S. EPA Label Information**

No information available

**16. OTHER INFORMATION**

<b>Prepared By</b>	Environmental, Health and Safety
<b>Prepared For</b>	Thermo Fisher Scientific Inc.©
<b>Issue Date</b>	No information available
<b>Revision Date</b>	18-May-2015
<b>Expiration Date</b>	SDS is valid 3 years from revision date. Contact wai.techservbev@thermofisher.com for the latest revision.
<b>Reason for revision</b>	Update to CLP Format

**Disclaimer**

IMPORTANT: The information contained in this SDS is correct to the best of our knowledge as of the issue date (or subsequent revision date, if any), and is to be used only as a guide. This SDS does not constitute a guarantee (express or implied) of any kind and we make no warranties of any kind as to the accuracy or completeness of the information contained herein or the merchantability or fitness of the product or this information for a particular purpose. It is the responsibility of each individual buyer/user to determine the suitability of this information and the product for its intended purposes. Product sales are subject to Thermo Fisher Scientific's standard terms and conditions of sale. This information relates only to the designated product as shipped and may not be valid if the product is used in combination with any other materials or is not used in accordance with our instructions, or is altered in any way. It is the responsibility of the buyer/user to ensure that its activities comply with all applicable government requirements. Since conditions of use of the product are not under direct control of Thermo Fisher Scientific, it is the duty of the buyer/user to determine the necessary conditions for the safe use of the product. Thermo Fisher Scientific will not be liable for any injuries or damages resulting from handling, use, misuse or contact with the product.

**End of Safety Data Sheet**