

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING**Product identifier****Product name** Digestion Reagent Powder**Other means of identification****Product Code(s)** 4036**UN-No** 1492**Recommended use of the chemical and restrictions on use****Recommended Use** Laboratory chemicals. Industrial (not for food or food contact use). Use as a laboratory reagent.**Details of the supplier of the safety data sheet****Manufacturer Address**LaMotte Company, Inc.
802 Washington Avenue
P.O. Box 329
Chestertown, MD 21620 USA
T 410-778-3100
F 410-778-9748**Emergency telephone numbers**

(CHEM-TEL):USA, Canada, Puerto Rico 1-800-255-3924 Outside North American Continent (Call collect) 813-248-0585

2. HAZARDS IDENTIFICATION

Acute toxicity - Oral	Category 4
Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2A
Respiratory sensitization	Category 1
Skin sensitization	Category 1
Specific target organ toxicity (single exposure)	Category 3
Physical hazards Oxidizing Solids.	Category 1

EMERGENCY OVERVIEW**DANGER****Hazard statements**

Harmful if swallowed. Causes skin irritation. Causes serious eye irritation. May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause an allergic skin reaction. May cause respiratory irritation.
May cause fire or explosion; strong oxidizer.

**Appearance** White**Physical state** powder**Odor** Odorless**Precautionary Statements - Prevention**

Wash face, hands and any exposed skin thoroughly after handling. Do not eat, drink or smoke when using this product. Wear protective gloves/protective clothing/eye protection/face protection. Avoid breathing dust/fume/gas/mist/vapors/spray. In case of inadequate ventilation wear respiratory protection. Contaminated work clothing should not be allowed out of the workplace. Use only outdoors or in a well-ventilated area.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing and wash before reuse. If skin irritation or rash occurs: Get medical advice/attention.

If experiencing respiratory symptoms: Call a POISON CENTER or physician. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. Rinse mouth.

Storage:

Keep container tightly closed and in a well-ventilated place. Store locked up.

Disposal:

Dispose of contents/container to an approved waste disposal plant.

3. COMPOSITION/INFORMATION ON INGREDIENTS*

Chemical name	CAS No.	Weight-%
Potassium persulfate	7727-21-1	100

4. FIRST AID MEASURES**First Aid Measures**

General advice	Do not get in eyes, on skin, or on clothing.
Eye contact	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Seek immediate medical attention/advice.
Skin contact	Wash off immediately with soap and plenty of water for at least 15 minutes. Take off contaminated clothing and wash before reuse. Excess acid on skin can be neutralized with a 2% solution of sodium bicarbonate in water. Call a physician immediately.
Inhalation	IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. Give artificial respiration if victim is not breathing. Call a physician immediately.
Ingestion	Do NOT induce vomiting. Call a physician immediately. Clean mouth with water. Never give anything by mouth to an unconscious person.
<u>Self-protection of the first aider</u>	Use personal protection recommended in Section 8. Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination.

5. FIREFIGHTING MEASURES

Suitable extinguishing media

Water spray. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Dike fire-control water for later disposal.

Hazardous combustion products

Contact with metals may evolve flammable hydrogen gas.

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions Remove all sources of ignition. Ensure adequate ventilation. Use personal protective equipment. See section 8.

Environmental precautions See Section 12 for additional Ecological Information.

Methods and material for containment and cleaning up

Methods for containment Contain and collect spillage with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see Section 13).

Methods for cleaning up Avoid dust formation. Clean up spill in a manner that does not disperse dust into the air. Use non-sparking tools and equipment. Keep in suitable and closed containers for disposal.

7. HANDLING AND STORAGE

Precautions for safe handling

Handling See section 8. Use only in area provided with appropriate exhaust ventilation. Handle in accordance with good industrial hygiene and safety practice. Do not eat, drink, or smoke when using this product.

Conditions for safe storage, including any incompatibilities

Storage: Keep containers tightly closed in a dry, cool and well-ventilated place. Separate from

incompatibles, combustibles, organic or other readily oxidizable materials. Keep away from heat, moisture, and incompatibles. Keep out of the reach of children.

Incompatible Products Organic material. Finely powdered metals. Halogens. Acids. Alkalis.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Chemical name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Potassium persulfate 7727-21-1	TWA: 0.1 mg/m ³ persulfate	*-	Not Established

Appropriate engineering controls

Engineering Measures Showers
Eyewash stations
Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/Face Protection Wear safety glasses with side shields (or goggles).

Skin and body protection Wear protective gloves/clothing.

Respiratory protection When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

Hygiene Measures Handle in accordance with good industrial hygiene and safety practice. Do not eat, drink or smoke when using this product. Wash hands before breaks and immediately after handling the product. Take off contaminated clothing and wash before reuse.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state powder
Appearance White
Odor Odorless

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	4	(as 10% solution)
Melting point / freezing point	100 °C	
Boiling point / boiling range	No information available	
Flash point	Not Applicable	
Evaporation rate		
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	9.3	(air=1)
Specific gravity	No information available	
Water solubility	Miscible with water	
Solubility in other solvents	No information available	
Partition coefficient	No information available	
Autoignition temperature	No information available	
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

Stability	UNSTABLE. Gradually decomposes losing oxygen. Decomposes more rapidly at higher temperature.
Hazardous Reactions	Substance is a strong oxidizer and its heat of reaction with reducing agents or combustibles may cause ignition. Contact with oxidizable substances may cause extremely violent combustion.
Hazardous polymerization	Hazardous polymerization does not occur.
Conditions to avoid	Keep away from open flames, hot surfaces and sources of ignition. Incompatible products.
Incompatible materials	Organic material. Finely powdered metals. Halogens. Acids. Alkalis.
Hazardous decomposition products	Sulfur oxides (SOx). and the contained metal. Oxygen is released.

11. TOXICOLOGICAL INFORMATION**Information on likely routes of exposure****Component identification**

Chemical name	ATEmix (oral)	ATEmix (dermal)	Inhalation LC50
Potassium persulfate 7727-21-1	= 802 mg/kg (Rat)	> 10000 mg/kg (Rabbit)	Not Established

Information on toxicological effects

Chemical name	ACGIH	IARC	NTP	OSHA
Potassium persulfate 7727-21-1	Not Established	Not Established	Not Established	Not Established

Target organ effects	Skin.
Other adverse effects	Inhalation of vapor can cause pulmonary edema.
ATEmix (oral)	802.00 mg/kg
ATEmix (dermal)	10,000.00 mg/kg

12. ECOLOGICAL INFORMATION**Ecotoxicity**

Unknown Aquatic Toxicity 100 % of the mixture consists of components(s) of unknown hazards to the aquatic environment

Chemical name	Toxicity to Algae	Toxicity to Fish	Daphnia Magna (Water Flea)
Potassium persulfate 7727-21-1	Not Established	Not Established	Not Established

Persistence and degradability

No information available.

Bioaccumulation/Accumulation

No information available.

Chemical name	Log Pow
Potassium persulfate 7727-21-1	Not Established

13. DISPOSAL CONSIDERATIONS**Disposal Methods** Dispose of contents/containers in accordance with local regulations.**Contaminated packaging** Do not reuse empty containers.

Chemical name	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
Potassium persulfate 7727-21-1	Not Established	-	Not Established	Not Established

Chemical name	RCRA - Halogenated Organic Compounds	RCRA - P Series Wastes	RCRA - F Series Wastes	RCRA - K Series Wastes
Potassium persulfate 7727-21-1	Not Established	Not Established	Not Established	Not Established

Chemical name	California Hazardous Waste Status
Potassium persulfate 7727-21-1	*_

14. TRANSPORT INFORMATION**DOT**

Proper shipping name POTASSIUM PERSULFATE
UN-No 1492
Hazard Class 5.1
Packing group III
Reportable Quantity (RQ) 225lb

IATA

UN-No 1492
Hazard Class 5.1
Packing group III

IMDG/IMO

UN-No 1492
Hazard Class 5.1
Packing group III

15. REGULATORY INFORMATION**International Inventories**

TSCA Complies
DSL/NDSL Complies
EINECS/ELINCS Complies
ENCS Complies
IECSC Complies
KECL Complies
PICCS Complies
AICS Complies

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China 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

US Federal Regulations**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical name	SARA 313 - Threshold Values %
Potassium persulfate 7727-21-1	Not Established

SARA 311/312 Hazard Categories

Acute health hazard	Yes
Chronic Health Hazard	No
Fire hazard	Yes
Sudden release of pressure hazard	No
Reactive Hazard	No

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

Chemical name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Potassium persulfate 7727-21-1	Not Established	Not Established	Not Established	Not Established

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

Chemical name	Hazardous Substances RQs	CERCLA/SARA RQ	RQ
Potassium persulfate 7727-21-1	*-	Not Established	-

US State Regulations

This product does not contain any Proposition 65 chemicals.

Chemical name	California Proposition 65
Potassium persulfate 7727-21-1	Not Established

U.S. State Right-to-Know Regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania
Potassium persulfate 7727-21-1	X	X	X

CPSC (Consumer Product Safety Commission) - Specially Regulated Substances**16. OTHER INFORMATION**

NFPA	Health hazard 1	Flammability 0	Instability 1	Physical and Chemical Hazards OX
Health hazard 1	Flammability 0	Stability 1		



Health Hazard	1
Fire Hazard	0
Reactivity	1

Prepared by
Issuing Date
Disclaimer

Regulatory Affairs Department
May-12-2015

The information provided on this SDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

End of Safety Data Sheet