

Revision number: 2 Revision date: 10/06/2014

1. IDENTIFICATION

Product name: Product code: Rivastigmine L-Tartrate R0093

Product use: Restrictions on use:

Company:

TCI America 9211 N. Harborgate Street Portland, OR 97203 U.S.A. Telephone: +1-800-423-8616 / +1-503-283-1681 Fax: +1-888-520-1075 / +1-503-283-1987 e-mail: sales-US@TCIchemicals.com www.TCIchemicals.com

2. HAZARD(S) IDENTIFICATION

OSHA Haz Com: CFR 1910.1200:

Acute Toxicity - Oral [Category 3]

Signal word:

Toxic if swallowed

Danger!

Pictogram(s) or Symbol(s):

Hazard Statement(s):



Precautionary Statement(s): [Prevention] [Response] [Storage] [Disposal]

Do not eat, drink or smoke when using this product. Wash hands and face thoroughly after handling. If swallowed: Immediately call a poison center or doctor. Rinse mouth. Store locked up. Dispose of contents and container in accordance with US EPA guidelines for the classification and determination of hazardous waste listed in 40 CFR 261.3. (See Section 13)

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance/Mixture: Components:	Substance Rivastigmine L-Tartrate
Percent:	>98.0%(HPLC)(T)
CAS Number:	129101-54-8
Molecular Weight:	400.43
Chemical Formula: Synonyms:	C14H22N2O2·C4H6O6 3-[(S)-1-(Dimethylamino)ethyl]phenyl N-Ethyl-N-methylcarbamate L-Tartrate , N-Ethyl-N-methylcarbamic Acid 3-[(S)-1-(Dimethylamino)ethyl]phenyl Ester L-Tartrate

4. FIRST-AID MEASURES

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For laboratory research purposes. Not for drug or household use.

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SAFETY DATA SHEET

Emergency telephone number: Chemical Emergencies: TCI America (8:00am - 5:00pm) PST +1-503-286-7624 Transportation Emergencies: Chemtrec 24-Hour +1-800-424-9300 (U.S.A.) +1-703-527-3887 (International) **Responsible department:** TCI America Environmental Health Safety and Security +1- 503-286-7624

4. FIRST-AID MEASURES	Immediately call a paican contar or dector. Mayo visiting to frach siz. Other estimation if statistics is a statistical second statistics in a statistical second statistical second statistical second statistics in a statistical second statistics in a statistical second statistical second statistics in a statistical second statistics in a statistical second statistics in a statistical second statistical second statistics in a statistical second statistics in a statistical second statistics in a statistic second statistical second statistics in a statistical second statistical second statistics in a statistic second statistical second statistics in a statistic second statistic
Inhalation:	Immediately call a poison center or doctor. Move victim to fresh air. Give artificial respiration if victim is not breathing. Administer oxygen if breathing is difficult. Keep victim warm and quiet. Treat symptomatically and supportively. Ensure that medical personnel are aware of the material(s) involved and take
Skin contact:	precautions to protect themselves. Immediately call a poison center or doctor. Remove and wash contaminated clothing before re-use. In case of contact with substance, immediately flush skin with running water for at least 20 minutes. Treat symptomatically and supportively. Ensure that medical personnel are aware of the material(s) involved and
Eye contact:	take precautions to protect themselves. If this chemical contacts the eyes, immediately wash (irrigate) the eyes with large amounts of water, occasionally lifting the lower and upper eyelids. If eye irritation persists get medical advice/attention. Move victim to fresh air. Check for and remove any contact lenses. Keep victim warm and quiet. Treat symptomatically and supportively. Effects of exposure to substance may be delayed. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.
Ingestion:	Toxic if swallowed. If swallowed, seek medical advice immediately and show the container or label. Do not use mouth-to-mouth method if victim ingested the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Loosen tight clothing such as a collar, tie, belt or waistband. If a person vomits place them in the recovery position so that vomit will not reenter the mouth and throat. Rinse mouth. Keep victim warm and quiet. Treat symptomatically and supportively. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.
Symptoms/effects:	
Acute: Delayed:	No data available No data available
Immediate medical attention:	WARNING: It might be dangerous to the person providing aid to give mouth-to-mouth respiration, because the inhaled material is toxic. If breathing has stopped, perform artificial respiration. Use first aid treatment according to the nature of the injury. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.
5. FIRE-FIGHTING MEASURES	
Suitable extinguishing media:	Dry chemical, CO_2 or water spray. Consult with local fire authorities before attempting large scale fire fighting operations.
Specific hazards arising from the chen Hazardous combustion products: Other specific hazards:	nical These products include: Carbon oxides Closed containers may explode from heat of a fire.
heated. Move containers from fire area if Special protective equipment for fire-fi Wear positive pressure self-contained bre ONLY; it may not be effective in spill situa	
provide little or no thermal protection.6. ACCIDENTAL RELEASE MEASURE	IDES
6. ACCIDENTAL RELEASE MEASO	JRES
Personal precautions:	Avoid contact with skin, eyes, and clothing. Keep people away from and upwind of spill/leak. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing (Section 8). Warn unnecessary personnel to move away. Stop leak if you can do it without risk. Ensure adequate ventilation.
Personal protective equipment:	Isolate the hazard area and deny entry to unnecessary and unprotected personnel. Safety glasses. Lab coat. Dust respirator. Be sure to use a MSHA/NIOSH approved respirator or
	equivalent. Wear protective gloves (nitrile).

Methods and materials for containment and cleaning up: ELIMINATE all ignition sources (no smoking, flares, sparks, or flames in immediate area). Stop leak if without risk. Ventilate the area. Absorb with an inert material and put the spilled material in an appropriate waste disposal container. Use clean non-sparking tools to collect absorbed material. Environmental precautions:

Keep away from living quarters. Prevent further leakage or spillage if safe to do so. Water runoff can cause environmental damage. Prevent entry into sewers, basements or confined areas; dike if needed.

7. HANDLING AND STORAGE

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7. HANDLING AND STORAGE	
Precautions for safe handling:	Avoid inhalation of vapor or mist. Do not ingest. Avoid contact with skin and eyes. Good general ventilation should be sufficient to control airborne levels. Keep container dry. Handle and open container with care. Wear suitable protective clothing, gloves and eye/face protection. When using do not eat, drink, or smoke. Keep away from sources of ignition.
Conditions for safe storage:	Store locked up. Keep containers tightly closed in a cool, well-ventilated place. Keep away from incompatibles. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Avoid prolonged storage periods.
Storage incompatibilities:	Combustible substances, Store away from oxidizing agents

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure limits:

No data available

Appropriate engineering controls:

Good general ventilation should be sufficient to control airborne levels. Ventilation is normally required when handling or using this product. Eyewash fountains should be provided in areas where there is any possibility that workers could be exposed to the substance. Follow safe industrial engineering/laboratory practices when handling any chemical.

Personal protective equipment	
Respiratory protection: Hand protection: Eye protection:	Dust respirator. Be sure to use a MSHA/NIOSH approved respirator or equivalent. Wear protective gloves. Safety glasses.
Skin and body protection:	Lab coat.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state (20°C): Form: Color: Odor:	Solid Crystal - Powder White - Almost white No data available			
Odor threshold:	No data available			
Melting point/freezing point: Boiling point/range: Decomposition temperature: Relative density: Kinematic Viscosity:	126°C (259°F) No data available No data available No data available No data available No data available	pH: Vapor pressure: Vapor density: Dynamic Viscosity	:	No data available No data available No data available No data available
Partition coefficient: n-octanol/water (log P _{ow})	No data available	Evaporation rate: (Butyl Acetate = 1)		No data available
Flash point: Flammability (solid, gas):	No data available No data available	Autoignition tempe Flammability or ex Lower:		No data available able
		Upper:	No data avail	able
Solubility(ies):				

Solubility(ies): Soluble: Methanol

10. STABILITY AND REACTIVITY

Reactivity: Chemical Stability: Possibility of Hazardous Reactions: Conditions to avoid: Incompatible materials: Hazardous Decomposition Products: Not Available. Stable under recommended storage conditions. (See Section 7) No hazardous reactivity has been reported. Avoid excessive heat and light. Oxidizing agents No data available

11. TOXICOLOGICAL INFORMATION

RTECS Number: FA9550000

Rivastigmine L-1	Fartrate	TCI AM	ERICA		Page 4 of 5
Acute Toxicity: No data available					
Skin corrosion/in No data available					
Serious eye dam No data available					
Respiratory or s No data available	kin sensitization:				
Germ cell mutag No data available					
Carcinogenicity:	:				
No data available					
IARC: No	o data available	NTP:	No data available	OSHA:	No data available
Reproductive to No data available					
Potential Health	ed to exposure: ay result in serious illness Effects: nation available; skin and e		ntact, Ingestion. It in irriatation. May be harmi	ful if inhaled or ingeste	d.
12. ECOLOGIO	CAL INFORMATION				
Ecotoxicity					
Fish:		No data available			
Crustace Algae:	a:	No data available No data available			
, iigaoi					
Persistence and Bioaccumulative Mobillity in soil: Partition coeffici n-octanol/water Soil adsorption (Henry's Law: constant (PaM ³ /r	e potential (BCF): ient: (log P _{ow}) (Koc):	No data available No data available No data available No data available No data available No data available			
13 DISPOSAL	CONSIDERATIONS				
Disposal of prod	luct:	rules and regulation chemical incineration assistance but doe regulatory complian Waste are listed in water ways, or the	ons. You may be able to disso or equipped with an afterburn as not replace these laws, not nce according to the law. US 0 40 CFR Parts 261. The proc soil.	blve or mix material wit aer and scrubber syste r does compliance in a EPA guidelines for Ida duct should not be allow	mply with Federal, State and Local h a combustible solvent and burn in a m. This section is intended to provide ccordance with this section ensure entification and Listing of Hazardous wed to enter the environment, drains,
Disposal of cont Other considera			sed product. Do not re-use er I, state and local regulations		substance.
14. TRANSPOI	RT INFORMATION				
DOT (US) UN number: UN2811	Proper Shipping Na Toxic solids, organic		Class or Division: 6.1 Toxic material.	Packing Group	:
1474					

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	T INFORMATION		
UN number: UN2811	Proper Shipping Name: Toxic solid, oxidizing, n.o.s.	Class or Division: 6.1 Toxic material.	Packing Group: III
IMDG UN number:	Proper Shipping Name:	Class or Division:	Packing Group
UN2811	Toxic solid, organic, n.o.s.	6.1 Toxic material.	Packing Group:
EmS number:	F-A,	S-A	
15. REGULATO	RY INFORMATION		
This product is NO ⁻ products not on the (i) These products 40 CFR 720.0 et se	a inventory list: are supplied solely for use in re ec.	search and development by or under the	lowing notices are required by 40 CFR 720.36 (C) for those ne supervision of a technically qualified individual as defined ir at is or becomes available will be supplied on a SDS sheet.
US Federal Regula	ations		
CERCLA Hazardo SARA 313: SARA 302:		isted	
SARA 313: SARA 302:	Not Not	isted	
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SARA 313: SARA 302: State Regulations State Right-to-Kno Massachus New Jerse Pennsylva California Proposi Other Information NFPA Rating:	Not Not Setts Not y Not nia Not ition 65: Not	isted isted isted isted isted isted	-
SARA 313: SARA 302: State Regulations State Right-to-Kno Massachus New Jerse Pennsylva California Proposi Other Information NFPA Rating: Health: Flammability:	Not Not Setts Not y Not nia Not ition 65: Not 0 0	isted isted isted isted isted HMIS Classificatior Health: Flammability:	0 0

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TCI chemicals are for research purposes only and are NOT intended for use as drugs, food additives, households, or pesticides. The information herein is believed to be correct, but does not claim to be all inclusive and should be used only as a guide. Neither the above named supplier nor any of its affiliates or subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All chemical reagents must be handled with the recognition that their chemical, physiological, toxicological, and hazardous properties have not been fully investigated or determined. All chemical reagents should be handled only by individuals who are familiar with their potential hazards and who have been fully trained in proper safety, laboratory, and chemical handling procedures. Although certain hazards are described herein, we can not guarantee that these are the only hazards which exist. Our SDS are based only on data available at the time of shipping and are subject to change without notice as new information is obtained. Avoid long storage periods since the product is subject to degradation with age and may become more dangerous or hazardous. It is the responsibility of the user to request updated SDS for products that are stored for extended periods. Disposal of unused product must be undertaken by qualified personnel who are knowledgeable in all applicable regulations and follow all pertinent safety precautions including the use of appropriate protective equipment (e.g. protective gogles, protective clothing, breathing equipment, face mask, fume hood). For proper handling and disposal, always comply with federal, state and local regulations.