

## SAFETY DATA SHEET

#### 1. Identification

Product identifier	Buspirone Related Compound N		
Other means of identification			
Catalog number	1078835		
CAS number	257877-44-4		
Chemical name	8,8'-(Butane-1,4-diyl)bis(8-a	zaspiro[4.5]decane-7,9-dione)	
Recommended use	Specified quality tests and a	ssay use only.	
Recommended restrictions	Not for use as a drug. Not fo	or administration to humans or animals.	
Manufacturer/Importer/Supplier/	Distributor information		
Manufacturer			
Company name Address	U. S. Pharmacopeia 12601 Twinbrook Parkway Rockville MD 20852-1790 United States		
Telephone	RS Technical Services	301-816-8129	
Website	www.usp.org		
E-mail	RSTECH@usp.org		
Emergency phone number	CHEMTREC within US & Canada	1-800-424-9300	
	CHEMTREC outside US & Canada	+1 703-527-3887	
2. Hazard(s) identification			
Physical hazards	Not classified.		
Health hazards	Not classified.		
Environmental hazards	Not classified.		
OSHA defined hazards	Not classified.		
Label elements			
Hazard symbol	None.		
Signal word	None.		
Hazard statement	Not available.		
Precautionary statement			
Prevention	Not available.		
Response	Not available.		
Storage	Not available.		
Disposal	Not available.		
Hazard(s) not otherwise	Nor available. None known.		
classified (HNOC)			
Supplemental information	Pharmaceutical related compound of unknown potency.		
3. Composition/information	n on ingredients		

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Substance			
Chemical name	Common name and synonyms	CAS number	%
Buspirone Related Compound	Ν	257877-44-4	100
4. First-aid measures			
Inhalation	If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing. Call a physician if symptoms develop or persist.		
Skin contact	Wash off with soap and water. Get medical attention if irritation develops and persists.		
Eye contact	Flush eyes with water as a precaution. Get medical attention if irritation develops and persists.		
Ingestion	Rinse mouth. If ingestion of a large amount does occur, call a poison control center immediately.		

Material name: Buspirone Related Compound N

1078835 Version #: 02 Revision date: 10-30-2017 Issue date: 06-04-2015

Most important symptoms/effects, acute and delayed	Pharmaceutical related compound of unknown potency. It is not known if occupational exposure may cause physiological effects.
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and treat symptomatically.
General information	Remove from exposure. Remove contaminated clothing. For treatment advice, seek guidance from an occupational health physician or other licensed health-care provider familiar with workplace chemical exposures. In the United States, the national poison control center phone number is 1-800-222-1222. If person is not breathing, give artificial respiration. If breathing is difficult, give oxygen if available. Persons developing serious hypersensitivity (anaphylactic) reactions must receive immediate medical attention.
5. Fire-fighting measures	
Suitable extinguishing media	Water. Foam. Dry chemical or CO2. Use fire-extinguishing media appropriate for surrounding materials.
Unsuitable extinguishing media	None known.
Specific hazards arising from the chemical	No unusual fire or explosion hazards noted.
Special protective equipment and precautions for firefighters	Wear suitable protective equipment.
Fire fighting equipment/instructions	Use water spray to cool unopened containers. As with all fires, evacuate personnel to a safe area. Firefighters should use self-contained breathing equipment and protective clothing.
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials.
General fire hazards	No unusual fire or explosion hazards noted.
6. Accidental release meas	sures
Personal precautions, protective equipment and emergency procedures	Keep unnecessary personnel away. Wear appropriate personal protective equipment. Avoid inhalation of dust from the spilled material. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. For personal protection, see section 8 of the SDS.
Methods and materials for containment and cleaning up	For waste disposal, see section 13 of the SDS. Avoid the generation of dusts during clean-up. Sweep up or vacuum up spillage and collect in suitable container for disposal. Clean surface thoroughly to remove residual contamination.
Environmental precautions	Prevent further leakage or spillage if safe to do so. No special environmental precautions required.
7. Handling and storage	
Precautions for safe handling	As a general rule, when handling USP Reference Standards, avoid all contact and inhalation of dust, mists, and/or vapors associated with the material. Clean equipment and work surfaces with suitable detergent or solvent after use. After removing gloves, wash hands and other exposed skin thoroughly. Select and use containment devices and personal protective equipment based on a risk assessment of material potency and exposure potential.
Conditions for safe storage, including any incompatibilities	Store in tight container as defined in the USP-NF. This material should be handled and stored per label instructions to ensure product integrity.
8. Exposure controls/pers	onal protection
Occupational exposure limits	No exposure limits noted for ingredient(s).
Biological limit values	No biological exposure limits noted for the ingredient(s).
Appropriate engineering controls	Control exposures to below the occupational exposure level (if available). Select and use containment devices and personal protective equipment based on a risk assessment of exposure potential. Cover all containers for solutions and slurries while being transferred. For laboratory

Individual protection measures, such as personal protective equipment

Eye/face protectionWear safety glasses with side shields, chemical splash goggles, or full face shield, if necessary.<br/>Base the choice of protection on the job activity and potential for contact with eyes or face. An<br/>emergency eye wash station should be available.

balance enclosure, glovebox). No open handling.

operations, use approved ventilation or containment system (biological safety cabinet, ventilated

 Skin protection
 Hand protection

 Hand protection
 Wear nitrile or other impervious gloves if skin contact is possible. When the material is dissolved or suspended in an organic solvent, wear gloves that provide protection against the solvent. Consider double gloves.

 Other
 Base the choice of skin protection on the job activity, potential for skin contact and solvents and reagents in use. Do not wear protective garments in common areas (e.g., cafeterias) or out-of-doors. Train employees in proper gowning and degowning practices. Wear disposable lab coat, disposable sleeve covers and two pair of gloves as appropriate for the task.

Respiratory protection	Chose respiratory protection appropriate to the task and the level of existing engineering controls. Use a powered air-purifying respirator (PAPR) with HEPA filters, disposable outerware and head cover for spill cleanup.
Thermal hazards	Wear appropriate thermal protective clothing, when necessary.
General hygiene considerations	Handle in accordance with good industrial hygiene and safety practice. Handling practices in this SDS are recommendations for laboratory use of reference standards. Procedures for any other uses or quantities should be determined after an appropriate assessment. Pharmacological effects may be seen with occupational exposure.

#### 9. Physical and chemical properties

Appearance	Appearance descriptions are general information and not specific to any USP lot.
Physical state	Solid.
Form	Solid.
Color	White.
Odor	Not available.
Odor threshold	Not available.
рН	Not available.
Melting point/freezing point	Not available.
Initial boiling point and boiling range	Not available.
Flash point	Not available.
Evaporation rate	Not available.
Flammability (solid, gas)	Not available.
Upper/lower flammability or expl	losive limits
Flammability limit - lower (%)	Not available.
Flammability limit - upper (%)	Not available.
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	Not available.
Vapor density	Not available.
Relative density	Not available.
Solubility(ies)	
Solubility (water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not available.
Other information	
Molecular formula	C22H32N2O4
Molecular weight	388.5
10. Stability and reactivity	
Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Material is stable under normal conditions.

The product is stable and non-reactive under normal conditions of use, storage and transport.
Material is stable under normal conditions.
No dangerous reaction known under conditions of normal use.
Contact with incompatible materials.
None known.
NOx. Irritating and/or toxic fumes or gases. Emits toxic fumes under fire conditions.

### 11. Toxicological information

#### Information on likely routes of exposure

Inhalation	Knowledge about health hazard is incomplete.
Skin contact	Knowledge about health hazard is incomplete.
Eye contact	Knowledge about health hazard is incomplete.
Ingestion	Knowledge about health hazard is incomplete.

Symptoms related to the	Not available.
physical, chemical, and	
toxicological characteristics	
Information on toxicological eff	ects
Acute toxicity	Not known.
Skin corrosion/irritation	Knowledge about health hazard is incomplete.
Serious eye damage/eye irritation	Knowledge about health hazard is incomplete.
Respiratory or skin sensitization	n
<b>Respiratory sensitization</b>	Knowledge about health hazard is incomplete.
Skin sensitization	Knowledge about health hazard is incomplete.
Germ cell mutagenicity	Knowledge about mutagenicity is incomplete.
Carcinogenicity	Knowledge about carcinogenicity is incomplete.
IARC Monographs. Overall	Evaluation of Carcinogenicity
Not listed.	
	ed Substances (29 CFR 1910.1001-1050)
Not regulated.	ogram (NTP) Report on Carcinogens
Not listed.	
Reproductive toxicity	Knowledge about health hazard is incomplete.
Specific target organ toxicity - single exposure	Knowledge about health hazard is incomplete.
Specific target organ toxicity - repeated exposure	Knowledge about health hazard is incomplete.
Aspiration hazard	Based on available data, the classification criteria are not met.
Further information	Pharmaceutical related compound of unknown potency. It is not known if occupational exposure may cause physiological effects.
12. Ecological information	1
Ecotoxicity	The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.
Persistence and degradability	No data is available on the degradability of this product.
Bioaccumulative potential	No data available.
Mobility in soil	No data available.
Other adverse effects	No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

#### 13. Disposal considerations

Disposal instructions	Dispose in accordance with all applicable regulations. Under RCRA, it is the responsibility of the user of the product to determine, at the time of disposal, whether the product meets RCRA criteria for hazardous waste.
Local disposal regulations	Dispose in accordance with all applicable regulations.
Hazardous waste code	The waste code should be assigned in discussion between the user, the producer and the waste disposal company.
Waste from residues / unused products	Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).
Contaminated packaging	Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied.

#### 14. Transport information

#### DOT

Not regulated as dangerous goods.

#### ΙΑΤΑ

Not regulated as dangerous goods.

# Transport in bulk according to<br/>Annex II of MARPOL 73/78 and<br/>the IBC CodeNot applicable.General informationIt is the shipper

It is the shipper's responsibility to determine the correct transport classification at the time of shipment.

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15. Regulatory informatio	n	
US federal regulations	One or more components are not listed on TSCA.	
	CERCLA/SARA Hazardous Substances - Not applicable. This product is not known to be a "Hazardous Chemical" as defined by Communication Standard, 29 CFR 1910.1200.	the OSHA Hazard
TSCA Section 12(b) Export	Notification (40 CFR 707, Subpt. D)	
Not regulated.		
CERCLA Hazardous Substa Not listed.	ance List (40 CFR 302.4)	
SARA 304 Emergency relea	se notification	
Not regulated.		
OSHA Specifically Regulate	ed Substances (29 CFR 1910.1001-1050)	
Not regulated.		
-	eauthorization Act of 1986 (SARA)	
Hazard categories	Immediate Hazard - No Delayed Hazard - No Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No	
SARA 302 Extremely hazar	dous substance	
Not listed.		
SARA 311/312 Hazardous chemical	No	
SARA 313 (TRI reporting) Not regulated.		
Other federal regulations		
Clean Air Act (CAA) Section	n 112 Hazardous Air Pollutants (HAPs) List	
Not regulated. Clean Air Act (CAA) Section	n 112(r) Accidental Release Prevention (40 CFR 68.130)	
Not regulated.		
Safe Drinking Water Act (SDWA)	Not regulated.	
US state regulations	California Safe Drinking Water and Toxic Enforcement Act of 1986 (Pro is not known to contain any chemicals currently listed as carcinogens of	
International Inventories		
Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	No
Canada	Domestic Substances List (DSL)	No
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	No
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	No
New Zealand	New Zealand Inventory	No
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	No
	nents of this product comply with the inventory requirements administered by the g e components of the product are not listed or exempt from listing on the inventory a	
16. Other information, inc	luding date of preparation or last revision	

#### 16. Other information, including date of preparation or last revision

Issue date	06-04-2015
Revision date	10-30-2017
Version #	02

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