

IN CASE OF EMERGENCY Emergency Phone: (614) 276-4000

Material Safety Data Sheet

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Common/Trade Name: Balsalazide Disodium Capsules USP

Chemical Name: (E)-5-[[-4-[[(2-carboxyethyl) amino]carbonyl] phenyl]azo]-2-hydroxybenzoic acid, disodium salt,

dihydrate

Synonyms: Balsalazide disodium dihydrate Molecular Formula: C₁₇H₁₃N₃O₆Na₂ · 2H₂O

Molecular Weight: 437.32 CAS No: 150399-21-6

Chemical Family: aminosalicylate

Product Use: Treatment of mildly to moderately active ulcerative colitis in adults.

Manufacturer's Name: Roxane Laboratories Inc.

Address: 1809 Wilson Road

Columbus, Ohio 43228

2. COMPOSITION / INFORMATION ON INGREDIENTS

Composition	CAS#	Mg	Exposure Limit
(E)-5-[[-4-[[(2-carboxyethyl) amino]carbonyl] phenyl]azo]-2-hydroxybenzoic acid, disodium salt, dihydrate	150399-21-6	750 mg	None established

REFER to PHYSICIAN'S DESK REFERENCE for common components present as <1%

3. HAZARDS IDENTIFICATION

Emergency Overview	Physical State: Light orange opaque capsules containing 750 mg balsalazide disodium and "54 795" imprinted in black ink on the cap and body, containing a yellow-orange powder. Color: Light orange opaque capsules containing a yellow-orange powder Odor: No data available WARNING! May be harmful if swallowed. Accidental ingestion of large amounts may be harmful
Primary Route(s) of Entry	Ingestion
Potential Health Effects:	Inhalation: Not expected to be an inhalation hazard in final pharmaceutical form. Eye Contact: Not expected to be a hazard to the eye in final pharmaceutical form. Skin Contact: Not expected to be a hazard to the skin. Can cause hypersensitive reactions resulting in rash, redness, itching and inflammation. Ingestion: May be harmful if ingested. Ingestion may cause adverse hepatic events, alopecia, and other systemic effects.
WARNINGS	Observe patients closely for exacerbations of ulcerative colitis while on treatment. Patients with pyloric stenosis may have prolonged gastric retention of balsalazide capsules. Renal toxicity has been observed in animals and patients given other mesalamine products. Therefore, caution should be exercised when administering balsalazide to patients with known renal dysfunction or a history of renal disease. Hypersensitivity reactions may include, but are not limited to, the following: anaphylaxis, bronchospasm, and skin reactions. The safety and efficacy of Balsalazide Disodium Capsules beyond 12 weeks in adults have not

	been established.					
	Pediatric us	Pediatric use information is protected by marketing exclusivity.				
	No drug into	No drug interaction studies have been conducted for balsalazide.				
Contraindications	Hypersensitivity to salicylates (e.g., aspirin), balsalazide disodium, or any other component of the therapeutic system.					
Adverse Reactions to	The most co	ommon side effects are headache, abdominal pain, diarrhea, nausea, vomiting,				
Product:	respiratory	infection, and joint pain.				
Toxicity Data:	See Section					
Effects of Overexposure:	The signs of overdosage might be expected to include nausea, vomiting and abdominal pain. Human experience with overdosage of balsalazide disodium is limited.					
Target Organs:	Rectum, colon, kidneys, liver					
4. FIRST AID MEA	SURES					
Eye Exposure		Any material that contacts the eye should be washed out immediately with water. If easy to do, remove contact lenses if worn. Get medical attention if symptoms persist.				
Skin Exposure	Wash with	soap and water. Get medical attention if symptoms occur.				
Ingestion	of medical	Call a physician or poison control center immediately. Only induce vomiting at the instruction of medical personnel. Never give anything by mouth to an unconscious person.				
Inhalation	respiration	Should not pose a hazard in the final form. Move to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately.				
Notes to Physician	If balsalazide overdose should occur, treatment should be supportive, with particular attention to correction of electrolyte abnormalities. In managing overdosage, consider the possibility of multiple drug involvement.					
5. FIRE AND EXPL	OSION HA	ZARDS				
Flammability		Lower: N/A Upper: N/A				
Flash Point		Not Applicable				
Extinguishing Media		Use water spray chemical, carbon dioxide or material appropriate for fire in surrounding area				
Special Fire Fighting Procedures		Wear full protective clothing and self-contained breathing apparatus.				
Unusual Fire/Explosi Hazards	on	Not Applicable				
Hazardous Combustion Products		Carbon dioxide, carbon monoxide, nitrogen oxides, sodium oxides				
6. ACCIDENTAL R	ELEASE IN	FORMATION				
equipment (see Sect	ion 8). Swee	CANT QUANTITIES OF TABLETS ARE BROKEN: Use appropriate protective ep/wipe up and containerize spill material in a compatible container. Dispose ons. Incineration of the waste at an approved facility is recommended.				
7. PRECAUTIONS	FOR SAFE	HANDLING AND USE				
Precautions Handling Significant Quantities of Broken Tablets:	Avoid contact with eyes, skin and clothing. Wash thoroughly after handling.					
Storage		Keep container tightly sealed. Store at 20 - 25°C (68 - 77°F) with excursions permitted between 15 - 30°C (59 - 86°F). Protect from light. Store away from foodstuffs.				
8. CONTROL MEASU	JRES AND F	ERSONAL PROTECTIVE EQUIPMENT				
Exposure Limits	None	None				
Engineering Controls	Not requ	Not required when handling tablets or containers. Good ventilation (typically 10 air changes per hour) should be used. Ventilation should be matched to conditions.				

Protection protect			required when handling tablets or containers. NIOSH/MSHA approved respirators for ection should be used if respirators are found to be necessary. Ventilation should be ched to conditions.					
			ot required when handling tablets. If containers are compromised or exposure is likely ear: Goggles, Lab Coat, Gloves					
Recommended Facilities Eye wa			wash, washing facilities					
9. PHYSICA	L/CHE	IICAL C	HARACTERIST	ics				
Appearance	capsules containing a yellow-orange powder		Melting point	Not available	Solubility in water	Complete		
Odor	Not avai	lable	Boiling point	Not available	Specific Gravity	Not available		
Taste	Not available		Vapor Pressure	Not available	Flashpoint	Not applicable		
рН	Not avai	lable	Density	Not available	Flammability Limits	Not applicable		
10. STABILITY	AND RE	ACTIVIT	Y DATA					
Stability	Stabl	Stable						
Incompatibilit	y None	None known						
Hazardous Decompositio	n Carb	Carbon dioxide, carbon monoxide, nitrogen oxides, sodium oxides						
Conditions to Avoid		Excessive heat						
Hazardous Polymerizatio	n Will r	Will not occur.						

11. TOXICOLOGICAL INFORMATION

Acute Toxicity:

A single oral dose of balsalazide disodium at 5 g/kg or 4-aminobenzoyl-ß-analine, a metabolite of balsalazide disodium, at 1 g/kg was non-lethal in mice and rats. No symptoms of acute toxicity were seen at these levels. In animal studies conducted at doses up to 2000 mg/kg (approximately 21 times the recommended 6.75 g/day dose on a mg/kg basis for a 70 kg person), balsalazide disodium demonstrated no nephrotoxic effects in rats or dogs.

Product:

No case of overdose has occurred with balsalazide.

Teratogenicity: Pregnancy Category B: No evidence of teratogenicity or other embryo/fetal toxicity was found when rats and rabbits were treated orally with balsalazide disodium at doses up to 2 g/kg/day (respectively 2.4 times and 4.7 times the recommended human dose).

Pregnancy: There are no adequate and well-controlled studies in pregnant women. Balsalazide disodium should be used during pregnancy only if clearly needed.

Nursing Mothers: It is not known whether balsalazide disodium is excreted in human milk. In the absence of this information, caution should be exercised when balsalazide is administered to a nursing woman.

Carcinogenesis/Mutagenesis: In a 24-month rat (Sprague Dawley) carcinogenicity study, oral (dietary) balsalazide disodium at doses up to 2 g/kg/day (2.4 times the recommended human dose on a mg/m² basis) was not tumorigenic. Balsalazide disodium was not genotoxic in the following *in vitro* or *in vivo* tests: Ames test, human lymphocyte chromosomal aberration test, and mouse lymphoma cell (L5178Y/TK+/-) forward mutation test, or mouse micronucleus test. However, it was genotoxic in the *in vitro* Chinese hamster lung cell (CH V79/HGPRT) forward mutation test.

4-aminobenzoyl-ß-analine, a metabolite of balsalazide disodium, was not genotoxic in the Ames test and mouse lymphoma cell (L5178Y/TK+/-) forward mutation test but was positive in the human lymphocyte chromosomal aberration test. N-acetyl-4-aminobenzoyl-ß-analine, a conjugated metabolite of balsalazide disodium, was not

genotoxic in the Ames test, mouse lymphoma cell (L5178Y/TK+/-) forward mutation test, or the human lymphocyte chromosomal aberration test

Impairment of Fertility: Balsalazide disodium at oral doses up to 2 g/kg/day (2.4 times the recommended human dose on a mg/m² basis) was found to have no effect on fertility and reproductive performance in rats.

Carcinogenicity: Not listed as a carcinogen or potential carcinogen by NTP, IARC Monographs or OSHA.

12. ENVIRONMENTAL IMPACT INFORMATION

No information is currently available on the environmental impact of this product.

13. DISPOSAL INFORMATION

Waste Disposal Considerations: Dispose of material according to federal, state and local disposal regulations or company operating procedures. Disposal by incineration is recommended.

At home: Discard away from children's reach.

14. TRANSPORTATION INFORMATION

This product is not subject to the regulations for the safe transport of hazardous chemicals.

DOT: Not regulated TDG: Not regulated IATA: Not regulated IMDG: Not regulated

15. REGULATORY INFORMATION

See package insert for NDC Numbers

DEA: Balsalazide disodium is not a controlled substance.

FDA: Balsalazide disodium is an approved anti-inflammatory prescription medication.

Canadian Controlled Products Regulations: This product has been classified in according to the hazard criteria of the Canadian Controlled Products Regulations, Section 33, and the MSDS contains all the required information.

WHMIS Classification for Product: Not controlled, exempt.

Inventory Status: This material is not listed on the US TSCA Inventory. Therefore, it can only be used for TSCA exempt purposes such as R&D or drug use.

This material is not on the DSL Inventory but is exempt.

16. OTHER DATA

ABBEVIATIONS:

N/A - not applicable

Prepared by: Roxane Laboratories, Inc.

References:

- 1. Balsalazide Disodium CapsulesUSP, Package Insert, Roxane Laboratories, Inc., Columbus, Ohio
- 2. Balsalazide Disodium USP, Ariel Weblnsight, Global Regulatory Database.
- 3. PDR Physicians Desk Reference
- 4. FDA, www.fda.gov

Date: 10/24/2012- REVISED MSDS

SEE CURRENT PACKAGE INSERT FOR FURTHER INFORMATION

The information provided is believed to be complete and accurate. If this product is combined with other materials, deteriorates or becomes contaminated, it may pose hazards not mentioned in this MSDS. It is the users' responsibility to use the information according to the application. Roxane Laboratories Inc. assumes no responsibility or liability resulting from the use of this information.