Material Safety Data Sheet (MSDS)

Revision Number: 1.0			Last updated	April 10, 2014
1. Product and Company Identifica	ation			
Product Name:	mBBr; [M	onobromobimane] *	*UltraPure Gra	ıde*
Manufacturer/Supplier:	AnaSpec, Ir			
	www.anasp			
	34801 Cam			
	Fremont, C			
	Tel: 510-79			
	Fax: 510-79			
		ce@anaspec.com		
Catalog Number	81433			
Unit Size	25mg			
	251115			
2. Hazards Identification				
Emergency Overview: We do rec	ommend handling	all chemicals with caut	ion. Use proper p	rotective
equipment when handling chemicals.	The toxicological	properties of this mater	rial have not been	fully investigated.
Use appropriate procedures to prevent	t opportunities for	direct contact with skin	or eyes and to pr	event inhalation.
GHS Hazard Classification: Not a GHS Physical Hazards N/A		nce or mixture accordi	ng to GHS	
GHS Health and Environmental H	Hazards: N/A			
GHS Signal Words: N/A				
GHS Hazard Statements: N/A				
P30	0: Wear protective 2+P350 If ON SK 5+P351+P338: If i	dust/fume/gas/mist/vap gloves/ protective clot IN- gently wash with p n eyes, rinse cautiously nove contact lenses if p	hing/eye protection lenty of soap and with water for se	water everal minutes.
Potential Health Effects for: Inhalation: If inhaled, remove to fress oxygen. Good hygiene p measures be used in an o	ractice requires the	it exposure is avoided a		

Ingestion: If swallowed, wash out mouth with water provided person is conscious. Call a physician.
Skin: In case of contact, immediately wash skin with soap and copious amount of water.
Eyes: In case of contact, immediately flush eyes with copious amounts of water for at least 15 minutes.
Chronic Exposures: No information available. We recommend limiting prolonged exposure.
Target Organs: N/A

Health Hazard: Flammability: Physical Hazard:	1 0 0
Health Hazard:	1
Fire: Reactivity Hazard:	0 0
	Flammability: Physical Hazard: Health Hazard: Fire:

	omponents:
Chemical N	$ \begin{array}{lll} \text{mBBr; [Monobromobimane]} \\ \text{Molecular formula: $C_{10}H_{11}BrN_2O_2$} \\ \text{Molecular weight: 271.11} \\ \text{CAS-No & $71418-44-5$} \\ \text{EC-No & N/A} \end{array} $
	$H_{3}C$ $H_{3}C$ $H_{2}Br$ $H_{3}C$ $H_{2}Br$
	No ingredients are hazardous according to OSHA criteria
4. First Aid	
<u>4. First Aid</u> Inhalation: Ingestion:	Measures If dust is inhaled, remove from contaminated area. Encourage patient to blow nose to ensure clear passage of breathing. If irritation or discomfort persists seek medical attention. If swallowed do NOT induce vomiting. If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration. Observe the patient carefully. Give water to rinse out mouth, then provide liquid slowly and as much as casualty can comfortable drink.
Inhalation:	Measures If dust is inhaled, remove from contaminated area. Encourage patient to blow nose to ensure clear passage of breathing. If irritation or discomfort persists seek medical attention. If swallowed do NOT induce vomiting. If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration. Observe the patient carefully. Give water to rinse out mouth, then provide liquid slowly and as much as casualty can comfortable

Extinguishing media:	Water spray or fog.
	Alcohol resistant foam.
	Dry chemical powder.
	BCF (where regulations permit).
	Carbon dioxide
Special firefighting procedures:	Alert Emergency Responders and tell them location and nature of hazard.
	Wear breathing apparatus plus protective gloves.
	Prevent, by any means available, spillage from entering drains or water course.
	Use water delivered as a fine spray to control fire and cool adjacent area.
	DO NOT approach containers suspected to be hot.
	Cool fire exposed containers with water spray from a protected location.
	If safe to do so, remove containers from path of fire.
	Equipment should be thoroughly decontaminated after use.
Unusual fire and explosions hazards:	Emits toxic fumes under fire conditions

6. Accidental Release Measures

Spill response	Remove all ignition sources.
	Clean up all spills immediately.
	Avoid contact with skin and eyes.
	Control personal contact by using protective equipment.
	Use dry clean up procedures and avoid generating dust.
	Place in a suitable, labeled container for waste disposal
Containment	Avoid all personal contact, including inhalation.
	Wear protective clothing when risk of exposure occurs.
	Use in a well-ventilated area.
	DO NOT enter confined spaces until atmosphere has been checked.
	DO NOT allow material to contact humans, exposed food or food utensils.
	Avoid contact with incompatible materials.
	When handling, DO NOT eat, drink or smoke.
	Keep containers securely sealed when not in use.
	Avoid physical damage to containers.
	Always wash hands with soap and water after handling.
	Use good occupational work practice.
	Empty containers may contain residual dust which has the potential to accumulate following settling. Such dusts may explode in the presence of an appropriate ignition source.
	Do NOT cut, drill, grind or weld such containers
PPE	Use personal protective equipment

7. Handling and Storage

Store at -20°C desiccated and protected from light. Store away from oxidizing agent.

8. Exposure Controls / Personal Protection		
Engineering controls	Local exhaust ventilation is require	

PPE	Use personal protective equipment
DDE	remove the contaminant.
	in turn, determine the "capture velocities" of fresh circulating air required to efficiently
	Air contaminants generated in the workplace possess varying "escape" velocities which,
	Powder handling equipment such as dust collectors, dryers and mills may require additional protection measures such as explosion venting.
	grounding.
	Build-up of electrostatic charge on the dust particle, may be prevented by bonding and
	(c): fresh-air hoods or masks
	(b): filter respirators with absorption cartridge or canister of the right type;
	(a): particle dust respirators, if necessary, combined with an absorption cartridge;
	respiratory protection should be considered. Such protection might consist of:
	If in spite of local exhaust an adverse concentration of the substance in air could occur,
	particulates in the workplace.
	Exhaust ventilation should be designed to prevent accumulation and re-circulation of
	mutual friction.
	even when particulates are relatively large, a certain proportion will be powdered by
Engineering controls	Local exhaust ventilation is required where solids are handled as powders or crystals;

9. Physical and Chemical Properties

Physical State	powder
Odour	Not available
Solubility in Water	N/A
Specific Gravity	Not available
РН	Not available
Boiling Point	Not available
Melting Point	Not available
Flash Point	N/A
Vapor Pressure:	N/A
Vapor Density:	N/A

10. Stability and Reactivity

Thermal Decomposition	No data available
Dangerous Products of Decomposition	No data available
Dangerous Reactions	COx, NOx when burned

Keep container tightly closed in a dry well-ventilated place. Containers which are opened must be carefully resealed and kept upright. Store in -20°C refrigerator.

11. Toxicological Information

RTECS Number	N/A
Toxicity	No information available.

Health Hazards	Although ingestion is not thought to produce harmful
	effects, the material may still be damaging to the
	health of the individual following ingestion, especially
	where pre-existing organ (e.g. liver, kidney)
	damage is evident. In an occupational setting however,
	ingestion of insignificant quantities is not thought to be
	cause for concern.
Potential Hazards	Not available
Carcinogenicity:	No significant acute toxicological data identified
OSHA Permissible Exposure Limit(PEL) Data	N/A
ACGIH Threshold Limit Values (TLV)	N/A

Reproductive Toxicity:

No information available

12. Ecological Information

No information available.

<u>13. Disposal Considerations</u>

All waste must be handled in accordance with local, state and federal regulations. Legislation addressing waste disposal requirements may differ by country, state and/ or territory. Each user must refer to laws operating in their area. In some areas, certain wastes must be tracked.

14. Transport Information

Hazard Class	N/A
Identification Number	N/A
Packing Group	N/A
Proper Shipping Name (DOT)	N/A

15. Regulatory Information

California Proposition 65: N/A US TSCA (Toxic Substance Control Act): N/A US CERCLA (Comprehensive Environmental Response, Compensation, and Liability Act: N/A US SARA Title III (Superfund Amendments and Reauthorization Act: N/A US Other: N/A

EC EINICS (European Inventory of Existing Commercial Chemical Substances) Number: N/A

EC Risk Statements: N/A

Other Country Regulations: N/A

16. Other Information

It is not intended for food, drug, household, agricultural or cosmetic use. A technically qualified individual experienced in handling potentially hazardous chemicals must supervise its use. The

AnaSpec Inc.

34801 Campus Drive, Fremont, CA 94555 Toll-Free: 800-452-5530 • Tel: 510-791-9560 • Fax: 510-791-9573 above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. Users should make independent decisions regarding completeness of the information based on all sources available. AnaSpec shall not be held liable for any damage resulting from handling or from contact with the above product.