MATERIAL SAFETY DATA SHEET

1. Identification of the product and of the company Identification of the product Catalogue No.: 233S Product name: KITAGAWA GAS DETECTOR TUBE NITRIC ACID VAPOUR 233S Manufacture/supplier identification Company: KOMYO RIKAGAKU KOGYO K.K. 1-8-28 SHIMONOGE, TAKATSU-KU, KAWASAKI-CITY, KANAGAWA 213-0006, JAPAN TEL 011-81-44-833-8911 FAX 011-81-44-833-2672 **Distributor Identification** Company: KITAGAWA AMERICA, LLC 200 WANAQUE AVENUE, SUITE 204, POMPTON LAKES, NEW JERSEY 07442, USA TEL 973-616-5410

2. Chemical identification of ingredients

TEL 973-865-3407 FAX 973-616-5420

Detector tube:

Inert porous carrier material impregnated with 4-Benzenazodiphenylamine and Sulphuric acid sealed in a glass tube.

CAS NUMBER	INGREDIENTS	mg/Tube	%	SYMBOLS
101-75-7	4-Benzenazodiphenylamine	< 0.1	< 0.1	C ₆ H ₅ N=NC ₆ H ₄ NHC ₆ H ₅
7664-93-9	Sulphuric acid	50	5	H_2SO_4

Hazardous information of ingredients Exposure Limit

Short-term:

N/A- As impregnated on silica gel.

Long-term:

N/A- As impregnated on silica gel.

In our experience, there is no release of these chemicals from the glass tube in normal use.

3. Hazards identification

Hazards identification:

Glass hazard

4. First aid measures (in the case of contact with the contents of a broken tube.)

Skin contact:

Wash affected area with copious amount of water.

Eye contact:

Wash eyes immediately with copious amount of water or normal saline solution Ensure lift eyelids and rinse for at least 15 min. Seek medical attention.

Ingestion:

Seek medical attention immediately.

5. Fire fighting measures	
Flash point:	
Extinguishing media:	Non-combustible
Extinguishing media.	All known extinguishants can be used.
Special fire fighting Proce	
	None
Unusual fire & Explosic	on hazards:
	Negligible fire hazard when exposed to heat or flame.
6. Accidental release mea	sures
Personal protection:	De net nich en hachen alere mit her her de if the tabe is hachen. Comment
	Do not pick up broken glass with bare hands if the tube is broken. Cover with inert absorbent such as vermiculite. Sweep up and contain for waste disposal.
	ment absorbent such as vermeunte. Sweep up and contain for waste disposal.
7. Handling and storage	
Handling & use:	
	Ensure the instructions for use are followed. Safety glasses and gloves should be
<u><u>S</u>tansa ay</u>	worn to prevent injury from splintering glass.
Storage:	Keep away from direct sunlight and store at 0-10 degree C.
	Reep away from direct summint and store at 0-10 degree C.
8. Exposure control/perso	nal protection
Respiratory protection:	
	Not applicable
Ventilation:	
Other protective equipment	Not applicable
Other protective equipment	Safety glasses and gloves
9. Physical/Chemical proj	perties
Appearance:	
	Pale yellow and white solid layers sealed in a glass tube .
Boiling point:	
	Not applicable
Melting point:	Not applicable
Specific gravity (H ₂ O=1):	
	Not applicable
Evaporation rate (BuOAc	
	Not applicable
Solubility in water:	Not applicable
Vapour pressure:	Not applicable
	Not applicable
Vapour density:	
	Not applicable
10 Stability and Depativity	
<u>10. Stability and Reactivity</u> Stability:	<u>ty</u>
Stability.	Stable at under ambient temperatures and pressures.
Incompatibilities:	r in the second s
-	Not applicable
Hazardous decompositior	
Hazardous polymerization	None
mazardous porymenzation	li. None

None

11. Toxicological information

General:

	In our experience this products is not harmful to health when correctly used/handled.
Skin contact: Eye contact:	Contents may be irritating to the skin if the tube broken.
Ingestion:	Contents may be irritating to the eyes if the tube broken.
	Glass hazard

12. Ecological information

General:

Do not allow to enter drinking water supplies.

13. Disposal considerations

General:

Ensure the tubes are open at both end. Submerge in Water. Neutralize water if necessary and dispose of as aqueous waste. The glass tubes can then be disposed of as inert "sharps".

14. Transport information

General:

This product does not pose significant risk to health, safety or property.

15. Regulatory information

General:

Not classified hazardous under CHIP2 Regulations as this product consists of a sealed glass tube containing a small amount of chemicals impregnated onto Silica sand.

16. Other information

Details given in this document are believed to be correct at the time of going to press. While proper care has been taken in the preparation of this document, but we cannot guarantee its accuracy or completeness, therefore we disclaim any liability for injury or damage when the product is used for other purposes than it is intended.