MATERIAL SAFETY DATA SHEET

1. Identification of the product and of the company Identification of the product Catalogue No.: 109U Product name: KITAGAWA GAS DETECTOR TUBE **CHLORINE 109U** 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 TEL 973-865-3407 FAX 973-616-5420

2. Chemical identification of ingredients

Inert porous carrier material impregnated with 3, 3'-Dimethylnaphthidine sealed in a glass tube.

CAS NUMBER	INGREDIENTS	mg/Tube	%	SYMBOLS
13138-48-2	3, 3'-Dimethylnaphthidine	< 0.1	< 0.1	$C_{22}H_{20}N_2$

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 c	case o	f contact	with the	contents	of a b	oroken tube.)
Skin contact:							
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	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:	Ensure int eyends and finse for at least 15 min. Seek medical attention.
ingestion.	Seek medical attention immediately.

Non-combustible

5. Fire fighting measures Flash point:

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Extinguishing media:

All known extinguish ants can be used.

Special fire fighting Procedures: None

Unusual fire & Explosion hazards:

Negligible fire hazard when exposed to heat or flame.

6. Accidental release measures

Personal protection:

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.

7. Handling and storage Handling & use: Storage:	Ensure the instructions for use are followed. Safety glasses and gloves should be worn to prevent injury from splintering glass. Keep away from direct sunlight and store at <25 degree C.
8. Exposure control/perso Respiratory protection: Ventilation: Other protective equipment	Not applicable
 9. Physical/Chemical prop Appearance: Boiling point: Melting point: Specific gravity (H₂O=1): Evaporation rate (BuOAcc Solubility in water: Vapour pressure: Vapour density: 	perties White layers sealed in a glass tube. Not applicable Not applicable Not applicable
 <u>10. Stability and Reactivity</u> Stability: Incompatibilities: Hazardous decomposition Hazardous polymerization <u>11. Toxicological informat</u> General: Skin contact: Eye contact: Ingestion: 	ty Stable at under ambient temperatures and pressures. Not applicable n products: None n: None

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.