MATERIAL SAFETY DATA SHEET

1. Identification of the product and of the company			
Identification of the product Catalogue No.:			
109SA			
Product name:			
KITAGAWA GAS DETECTOR TUBE CHLORINE 109SA			
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

Detector tube:

Inert porous carrier material impregnated with o-Tolidine and EDTA sealed in a glass tube.

CAS NUMBER	INGREDIENTS	mg/Tube	%	SYMBOLS
119-93-7	o-Tolidine	< 0.1	< 0.1	$(C_6H_3NH_2CH_3)_2$
60-00-4	EDTA	<0.1	< 0.1	$(-CH_2N(CH_2COOH)_2)_2$

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 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:	
Eastin and this area disc	Non-combustible
Extinguishing media:	All known extinguishants can be used.
Special fire fighting Proc	
1 0 0	None
Unusual fire & Explosi	on hazards:
	Negligible fire hazard when exposed to heat or flame.
<u>6. Accidental release mea</u>	<u>isures</u>
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:	
	Ensure the instructions for use are followed. Safety glasses and gloves should be
Storage:	worn to prevent injury from splintering glass.
Stolage.	Keep away from direct sunlight and store at 25 degree C or lower.
8. Exposure control/perso	onal protection
Respiratory protection:	
Vantilation	Not applicable
Ventilation:	Not applicable
Other protective equipme	
1 11	Safety glasses and gloves
9. Physical/Chemical pro	perties
Appearance:	White colid lever cooled in a close type
Boiling point:	White solid layer sealed in a glass tube.
Doming point.	Not applicable
Melting point:	
	Not applicable
Specific gravity ($H_2O=1$)	
Evaporation rate (BuOAc	Not applicable
	Not applicable
Solubility in water:	
	Not applicable
Vapour pressure:	Net evel; et le
Vapour density:	Not applicable
vapour density.	Not applicable
10. Stability and Reactivi	ty
Stability:	
Stable at under ambient temperatures and pressures.	
Incompatibilities:	Not applicable
Hazardous decomposition	
	None
Hazardous polymerizatio	
	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.