Safety Data Sheet

Date of issue : 01 Mar. 2005 Date of revision : 23 Jun. 2016

Product name Company Name Address Contact point Telephone number Facsimile number	 Colormetry reagent cartridge CMI MIURA CO.,LTD. 7 Horie, Matsuyama, Ehime, 799- SDS Section 	
Emergency contact Recommended use and restrictions on use Product code SDS No.	: Chemical for analytical use S199-003-5220-0 KMSDS-00020	
GHS Classification		
Health hazards	Skin corrosion/irritation Serious eye damage/eye irritation Specific target organ toxicity (single exposure)	Category 1 Category 1 Category 3 (Respiratory tract irritation)
Label elements Pictogram or symbol		
Signal word	: Danger	
Hazard statements	: Causes severe skin burns and eye damage May cause respiratory irritation	
Precautions [Prevention]	 Do not disassembly the reagent of Do not breathe dust/fume/gas/mis Wash hands and any exposed sk Rinse mouth. Use only outdoors or in a well-ver Wear protective gloves, protective or face protection. 	st/vapours/spray. in thoroughly after handling. ntilated area.
[Response]	 IF INHALED: Remove person to f breathing. Immediately call a POI- IF ON SKIN (or hair): Take off immediately. Rinse skin with water/shippolSON CENTER/doctor. Washing reuse. IF IN EYES: Rinse cautiously with Remove contact lenses, if present Immediately call a POISON CENT IF SWALLOWED: Rinse mouth. In induce vomiting. Get immediate mouther and the shippola shippo	SON CENTER/doctor. mediately all contaminated ower. Immediately call a contaminated clothing before water for several minutes. and easy to do. Continue rinsi FER/doctor. Drink plenty of water. Do NOT
[Storage]	: Store in a well-ventilated place. Store in a cool and dark place. Store locked up. Keep container tightly closed.	
[Disposal]	: Dispose of contents/container by controlled industrial waste dispose governor.	
Country/area information	: Prepared for Japan	

Substance or Mixture	: Mixture
Chemical name or commercial name	: Colormetry reagent cartridge CMU-CL2

Colormetry reagent cartridge CMU-CL2 MIURA CO., LTD. KMSDS-00020

Ingredient name	Chemical	Concentration	CAS No.	Gazette Notification	
	formula	(wt.%)	CA5 NO.	ENCS No.	ISHL No.
Phosphoric Acid	H ₃ PO ₄	10 ~ 15	7664-38-2	(1)-422	_
Phosphate	Confidential	Confidential	Confidential	Confidential	-
Propylene Glycol	$C_3H_8O_2$	Confidential	57-55-6	(2)-234	2-(8)-321
Pigment	Confidential	Confidential	Confidential	Confidential	—

Impurities and stabilizing additives that : None contribute to the classification

FIRST - AID MEASURES	
Inhalation	: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/doctor.
Skin contact	 Rinse skin with clean running water for at least 15 minutes. Take off immediately all contaminated clothing. Wash contaminated clothing before reuse. Immediately call a POISON CENTER/doctor.
Eye contact	 Rinse cautiously with clean running water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor.
Ingestion	 Do NOT induce vomiting. Rinse mouth. Drink plenty of water. Get immediate medical advice/attention.
Expected immediate and delayed symptoms	: Causes severe skin burns and eye damage May cause respiratory irritation
FIRE - FIGHTING MEASURES	
Extinguishing media	: Water, foam, carbon dioxide, dry chemical powder
Unsuitable extinguishing media	: No information available
Specific hazards	: Fire may produce toxic gases.
Special fire-fighting methods	: Move containers from fire area if it can be done without risk, if not possible, apply water from a safe distance to cool and protect surrounding area.
Protective actions for fire-fighters	: Fire-fighters should wear appropriate protective equipment and protective clothing.
ACCIDENTAL RELEASE MEASURES	
Personal precautions, protective equipment and emergency procedures	 Wear proper protective equipment (refer to "8. EXPOSURE CONTROLS/PERSONAL PROTECTION") and avoid eye and skin contact. Work from windward, and retract the people downwind. Deny unnecessary entry other than the people involved by, for example, using a rope.
Environmental precautions	 Use caution: Do not discharge leaked products into rivers, etc. an adversely affect the environment. Do not discharge waste water that contains this product without it being properly treated to suit the environment. For other ecological information, refer to Section 12.
Methods and materials for containment and cleaning up	: Collect spillage in an empty container which can be covered and sealed before implementing disposal processing. Neutralize the spilled area with sodium carbonate or slaked lime. Then wash away with plenty of water.

Measures for preventing secondary accidents	: Clean contaminated objects and polluted areas thoroughly observing environmental regulations. Prevent the substance from flowing into waterways, sewers, basement, or confined areas.
7. HANDLING AND STORAGE	
Handling	
Technical measures	: Do not use this product for other than the intended use. Apply equipment measures described in "8. EXPOSURE CONTROLS/PERSONAL PROTECTION", and wear protective equipment. Do not disassembly the product.
Safety handling precautions	 Avoid contact with skin, eyes, and clothing. Wear personal protective equipment. Do not breathe dust/fume/gas/mist/vapours/spray. Wash hands and any exposed skin thoroughly after handling. Rinse mouth.
Storage	
Safe storage conditions Storage conditions	: Protect from sunlight. Store locked up. Store at temperatures not exceeding 40℃/104F.
Packaging material	: Packaging (Polyethylene)
Incompatible substances or mixtures	: Refer to "10. STABILITY AND REACTIVITY".

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Chamical some or	Administrative Control Level	Occupational Exposure Limits	
Chemical name or common name	(Ministry of Health, Labour and Welfare)	Japan Society for Occupational Health	ACGIH
Phosphoric Acid	-	1 mg/m3 (2014)	TWA: 1 mg/m3 STEL: 3 mg/m3
Phosphate	-	-	-
Propylene Glycol	-	_	-
Pigment	-	_	-

Engineering controls	Provide the safety shower facility, and hand- and eye-wash facility close to the site of handling. Further, their position should be clearly marked.
Personal protective equipment	
Respiratory protection	: Protective mask
Hand protection	: Protective gloves
Eye protection	: Eye protection (safety goggles) or face protection
Skin and body protection	: Protective clothing

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance (physical state, color etc.) Odor pH	: Red clear liquid : Almost odorless : 1.6
Melting point/freezing point	: No data available
Boiling point, initial boiling point, and	: No data available
boiling range Flash point	: ≥104℃
Explosive limits	: No data available
Vapor pressure	: No data available
Vapor density (air = 1)	: No data available
Specific gravity (Relative density)	: 1.07
Solubility	: Water : Soluble
n-Octanol/water partition coefficient (log Pow)	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Odor threshold	: No data available

Evaporation r Flammability Viscosity	ate (butyl acetate = 1) (solid, gas)	No data availableNot applicableNo data available	
10. STABILITY AN	ID REACTIVITY		
Stability		: Stable under recommended storage conditions.	
Possibility of	Possibility of hazardous reactions : Reacts with alkaline substances and generates heat.		
Conditions to	avoid	: Direct sunlight, Heating, High temperature	
Incompatible	materials	: Alkaline substances, Metals	
Hazardous de	ecomposition products	: No data available	
1. TOXICOLOGIO	CAL INFORMATION		
Acute toxicity	: Oral Dermal Inhalation (gas) Inhalation (vapor) Inhalation (mist)	 ATEmix > 5000 (Out of category) Not possible to classify because of insufficient data. Inhalation gas is not possible, as it is liquid under GHS definitions and thus not applicable. Not possible to classify because of insufficient data. Not possible to classify because of insufficient data. 	
Skin corrosion	n/irritation	: Causes severe skin burns and eye damage (category 1)	
Serious eye o	lamage/irritation	: Causes serious eye damage (category 1)	
Respiratory or skin sensitization		: Not possible to classify because of insufficient data.	
Germ cell mutagenicity		: Not possible to classify because of insufficient data.	
Carcinogenicity		: Not possible to classify because of insufficient data.	
Reproductive	toxicity	: Not possible to classify because of insufficient data.	
Specific targe exposure)	t organ toxicity (single	: May cause respiratory irritation (category 3)	
Specific targe exposure)	t organ toxicity (repeated	: Not possible to classify because of insufficient data.	
Aspiration ha	zard	: Not possible to classify because of insufficient data.	
2. ECOLOGICAL	INFORMATION		
Ecotoxicity		: Acute : Not possible to classify because of insufficient data. Chronic: Not possible to classify because of insufficient data.	
Persistence a	and degradability	: No information available	
Bioaccumulat	ive potential	: No information available	
Mobility in soi	1	: No information available	
Hazardous to	the ozone layer	: Not possible to classify because of insufficient data.	
3. DISPOSAL CO	ONSIDERATIONS		
Waste from re	esidues	: Dispose of in accordance with national/local laws and regulations	
Contaminated contaminated	d containers and packaging	: Dispose of in accordance with national/local laws and regulations	
14. TRANSPORT	INFORMATION		
International		· LIN1760	

UN Number UN Proper Shipping Name **UN Class**

: UN1760

: CORROSIVE LIQUID, N.O.S. : 8

Packing group Marine pollutant Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	: III : Not applicable : Noxious Liquid (Cat. Z)
Domestic regulations ERG GUIDE No.	: 154
Special precautions	: Do not throw containers. Check for leakage from containers. Load so as to prevent containers from falling, dropping, and damage, and strictly execute the collapse prevention of loads. Refer to "6. ACCIDENTAL RELEASE MEASURES", "7. HANDLING AND STORAGE", and "8. EXPOSURE CONTROLS/PERSONAL PROTECTION" to adopt the most appropriate method.

15. REGULATORY INFORMATION

Poisonous and Deleterious Substances Control Act	: Not applicable
Pollutant Release and Transfer Register Law	: Not applicable
Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc.	: Priority Assessment Chemical Substances (Propylene Glycol)
Industrial Safety and Health Act	 Dangerous or Harmful Substances Subject to Be Indicated their Names, etc. (Phosphoric Acid) Dangerous Articles and Harmful Substances Whose Names, etc. Should Be Notified (Phosphoric Acid)
Act on Prevention of Marine Pollution and Maritime Disaster	: Noxious liquid substance (Phosphoric Acid, Propylene Glycol)
Ship Safety Act	: Corrosive substance (Phosphoric Acid)
Civil Aeronautics Act	: Corrosive substance (Phosphoric Acid)

16. OTHER INFORMATION

General Inquiry Point	: MIURA CO.,LTD.	SDS Section
	Telephone number	: +81-89-979-7123
	Facsimile number	: +81-89-979-7101

References

JIS Z 7253 (2012), Japanese Standards Association

JIS Z 7252 (2014), Japanese Standards Association

Recommendations on the transport of dangerous goods-Model Regulations 17th revised edition, UN Recommendations on the transport of dangerous goods-Manual of Tests and Criteria 5th revised edition, UN Emergency Response Guidebook-Application to the Container Yellow Card Labeling System 4th revised edition, Japanese Standards Association

"Chemical Database Search Service", Japan Chemical Database Ltd. International Chemical Safety Cards (ICSC) Japanese version

Globally Harmonized System of Classification and Labelling of Chemicals (GHS) 5th revised edition, UN National Institute of Technology and Evaluation (NITE), HP

The information in this Safety Data Sheet (SDS) is based on the latest information and data concerning revision date or preparation date. However, all information about the product is not covered in its entirety, and therefore, please handle with care. The precautions are intended for normal handling; therefore, please refrain from using for specialized applications. In addition, the descriptions of the content, physical/chemical properties, hazards, etc., are for nothing more than providing information, without any warranty of any kind.

End of Safety Data Sheet