


MATERIAL SAFETY DATA SHEET

SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION					
PRODUCT NAME: Mitsubishi SDP - aC L Plate Cleaner		DATE: June 2, 2009			
PRODUCT NUMBER:		DATE: June 2, 2009			
TRADE NAME: Mitsubishi SDP - aC L Plate Cleaner GENERAL USE: Plate cleaner for SDP - α System CHEMICAL FAMILY: PRODUCT DESCRIPTION: White emulsion or separated 2 phases (oil phase and water phase), citrus odor					
MANUFACTURER Mitsubishi Paper Mills Ltd.	DATE PREPARED: June 2, 2009				
ADDRESS (NUMBER, STREET, P.O. BOX) 4-2 Marunouchi 3-Chome	SUPERSEDES: December 16, 2008				
(CITY, STATE AND ZIP CODE) Chiyoda-ku, Tokyo 100-005	COUNTRY Japan	TELEPHONE NUMBER FOR INFORMATION / Customer Service 03-3213-3641			
DISTRIBUTOR Mitsubishi Imaging (MPM), Inc.	Chemtrec 24-HOUR EMERGENCY TELEPHONE NUMBER				
ADDRESS (NUMBER, STREET, P.O. BOX) 555 Theodore Fremd Avenue	1-800-424-9300 01-703-527-3887				
(CITY, STATE AND ZIP CODE) Rye, NY 10580	COUNTRY USA	North America Toll Free International			
SECTION 2 - HAZARDOUS INGREDIENTS					
Hazardous Components	% (by Weight)	CAS #	EINECS #	Hazard Symbol	RISK PHRASES (Full Text Section 15)
Triethylene glycol monobutyl ether (a)	3 - 7	143-22-6	205-592-6	Xi	R-36/37/38
Ethylene glycol monophenyl ether (a, b)	3 - 7	122-99-6	204-589-7	Xn	R-22,36
1-Methyl-4-isopropenyl-1-cyclohexene	7 - 13	5989-27-5	227-813-5	Xi, N	R-10, 38, 43, 50/53
(a) A "Yes" in the SARA TITLE III column in Section 2 indicates a toxic chemical subject to annual reporting requirements of Section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 and of 40 CFR 372. (b) Indicates an employee's skin exposure shall be prevented or reduced to the extent necessary in the circumstances through the use of gloves, coveralls, goggles, or other appropriate equipment.					
NOTES:	Note: This Material Safety Data Sheet is prepared to comply with the United States Occupational Safety and Health Administration (OSHA) Hazard Communication Standard (29 CFR 1910.1200), the Canadian Workplace Hazardous Materials Information System (WHMIS), and European Union Directive 91/155/EEC. Hazard symbols and risk phrases are based on maximum listed concentration of each hazardous ingredient. Unlisted ingredients are not "hazardous" per the OSHA Hazard Communication Standard (29 CFR 1910.1200), the Canadian Workplace Hazardous Materials Information System (WHMIS) or the European (GHS) directive 91/155/EEC and are considered trade secrets under US Federal Law (29CFR and 40CFR), Canadian Law (Health Canada Legislation), and European Union Directive 67/548/EEC.				
SECTION 3 - HAZARDS IDENTIFICATION					
EMERGENCY OVERVIEW					
Slightly acidic liquid, contact may cause skin & eye irritation. Combustible under OSHA standards. Ingestion may cause gastric distress. Hazard symbols for this product - Xi, Risk Phrases - R36/37/38					
POTENTIAL HEALTH EFFECTS					
INHALATION: Irritating to upper respiratory tract and mucous membranes; may cause headache, dizziness, nausea, vomiting and malaise.					
SKIN: Irritation may result from contact; prolonged contact may cause moderate reddening, swelling and possible necrosis.					
EYES: Contact with eyes is painful and irritating and may cause chemical burns, associated with redness and swelling of the conjunctiva.					
INGESTION: Irritating to digestive tract; may cause gastric distress, stomach pains and vomiting; moderately toxic, may result in red blood cell					
CARCINOGENICITY:					
NTP? NO		IARC MONOGRAPHS? NO		OSHA REGULATED? NO	
CALIFORNIA, Prop.65? NO				ESIS NOTATION? NO	

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SECTION 4 - FIRST AID MEASURES

INHALATION:

Remove affected person to fresh air; wash mouth and nasal passages with water repeatedly; if breathing difficulties persist seek medical attention.

EYES:

Remove contact lenses. Immediately flush eyes for 15 minutes in clear running water while holding eyelids open; seek medical attention immediately.

SKIN:

Wash contacted area with soap and water; DO NOT attempt to neutralize with chemical agents; if irritation persists, seek medical attention.

INGESTION:

Drink large quantities of water or milk; DO NOT induce vomiting; never give anything by mouth to an unconscious person; seek medical attention immediately.

SECTION 5 - FIRE FIGHTING MEASURES

GENERAL HAZARDS:

Product is combustible. Products of combustion include compounds of carbon, hydrogen and oxygen, including Carbon Monoxide.

EXTINGUISHING MEDIA:

Carbon Dioxide, water, water fog, dry chemical, chemical foam.

FIRE FIGHTING PROCEDURES:

Self - contained respiratory equipment; cool containers to prevent pressure buildup and possible explosion when exposed to extreme heat.

UNUSUAL FIRE AND EXPLOSION HAZARDS:

Closed containers can explode due to buildup of pressure when exposed to extreme heat.

HAZARDOUS COMBUSTION PRODUCTS:

Smoke, fumes, oxides of carbon.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:

COMBUSTIBLE - Evacuate and ventilate area; remove all sources of sparks, ignition and open flames; confine and absorb into approved absorbent; place material into approved containers for disposal; do not wash to sewer or waterway. Refer to SARA Title III, Section 313 40 CFR 372 for detailed instructions concerning reporting requirements. Do not discharge into lakes, ponds, streams or public waters.

SECTION 7 - HANDLING AND STORAGE

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:

This material is combustible. It should be stored in tightly closed containers in a cool, well ventilated area. Vapor may form explosive mixtures in air. All sources of ignition should be controlled. This material may be classified as COMBUSTIBLE by DOT unless transported by vessel or aircraft. Refer to 49 CFR 173.120. Keep this and other chemicals out of reach of children. Avoid inhaling concentrated fumes or vapors.

SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

HAZARDOUS COMPONENTS	NIOSH				ACGIH		OSHA	
	TWA ppm	TWA mg/m3	STEL ppm	STEL mg/m3	TLV/TWA ppm	TWA mg/m3	STEL ppm	STEL mg/m3
Triethylene glycol monobutyl ether (a)		NE				NE		
Ethylene glycol monophenyl ether (a, b)	25 (skin)							
1-Methyl-4-isopropenyl-1-cyclohexene		NE				NE		

PERSONAL PROTECTION

RESPIRATORY PROTECTION:

None required while threshold limits (Section 2) are kept below maximum allowable concentrations; if TWA exceeds limits, NIOSH approved respirator must be worn. Refer to 29 CFR 1910.134 or European Standard EN 149 for complete regulations.

PROTECTIVE GLOVES:

Neoprene or rubber gloves with cuffs.

EYE PROTECTION:

Protective eyeglasses or chemical safety goggles. Refer to 29 CFR 1910.133 or European Standard EN166.


OTHER PROTECTIVE CLOTHING OR EQUIPMENT:

Coveralls, apron, or other equipment should be worn to minimize skin contact.

WORK / HYGIENIC PRACTICES:

Practice safe workplace habits. Minimize body contact with this, as well as all chemicals in general.

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SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES			
APPEARANCE AND ODOR White emulsion or separated phases, citrus odor.		VAPOR PRESSURE 17 mm Hg @ 20° C	
pH 4.81 ± 0.2		SPECIFIC GRAVITY (WATER = 1) 1.019 ± 0.005	
BOILING POINT / BOILING RANGE 212° F (100° C)		SOLUBILITY IN WATER Complete	
FLASH POINT 135° F (57.1° C) TCC (oil phase)		VISCOSITY Not specified.	
FLAMMABLE LIMITS LEL: ND UEL: ND		VAPOR DENSITY (AIR = 1) > 1	
AUTO-IGNITION TEMPERATURE ND		EVAPORATION RATE (WATER = 1) < 1	
VOLATILE ORGANIC COMPOUND (VOC) INFORMATION (VOC Content Wt%) VOC= 12.4% Maximum.			
SECTION 10 - STABILITY AND REACTIVITY			
STABILITY STABLE X		CONDITIONS TO AVOID: Extreme temperatures, open flames.	
INCOMPATIBILITY (MATERIALS TO AVOID): Strong oxidizers, strong acids.			
HAZARDOUS DECOMPOSITION OR BYPRODUCTS: Decomposition will not occur if handled and stored properly. In case of a fire, oxides of carbon, hydrocarbons, fumes, and smoke may be produced.			
HAZARDOUS POLYMERIZATION: Will Not Occur.		CONDITIONS TO AVOID: None Related to Polymerization.	
SECTION 11 - TOXICOLOGICAL INFORMATION			
Hazardous Components	CAS # EINECS #	LD50 of Ingredient (Specify Species and Route)	LC50 of Ingredient (Specify Species)
Triethylene glycol monobutyl ether (a)	143-22-6	5300 mg / kg Oral - rat	NE
	205-592-6		
Ethylene glycol monophenyl ether (a, b)	122-99-6	1260 mg /kg Oral - rat	NE
	204-589-7		
1-Methyl-4-isopropenyl-1-cyclohexene	5989-27-5	> 5000 mg / kg Oral - rat	NE
	227-813-5		
Do not allow undiluted and/or large quantities of product to enter sewage systems or reach ground water or bodies of water.			
SECTION 12 - ECOLOGICAL INFORMATION			
No data are available on the adverse effects of this material on the environment. Neither COD nor BOD data are available. Based on the chemical composition of this product it is assumed that the mixture can be treated in an acclimatized biological waste treatment plant system in limited quantities. However, such treatment should be evaluated and approved for each specific biological system. None of the ingredients in this mixture are classified as a Marine Pollutant.			
SECTION 13 - DISPOSAL CONSIDERATIONS			
WASTE DISPOSAL METHOD: According to the European Waste Catalogue, waste codes are application specific and should be assigned by the user based on the application for which the product is used. Dispose of in accordance with Local, State, and Federal Regulations. This product may produce hazardous vapors or fumes in a closed disposal container creating a dangerous environment. Refer to "40 CFR Protection of Environment Parts 260 - 299" for complete waste disposal regulations. Consult your local, state, or Federal Environmental Protection Agency before disposing of any chemicals. Do not flush to sanitary sewer or waterway.			
SECTION 14 - TRANSPORT INFORMATION			
PROPER SHIPPING NAME: Flammable liquid, n.o.s. (1-Methyl-4-isopropenyl-1-cyclohexene).			
DOT HAZARD CLASS / Pack Group: 3 / III		IATA HAZARD CLASS / Pack Group: 3 / III	
REFERENCE: 49 CFR 173.150, .203, .242		IMDG HAZARD CLASS: 3 / III	
UN / NA IDENTIFICATION NUMBER: UN 1993		RID/ADR Dangerous Goods Code: 3	
LABEL: FLAMMABLE LIQUID		UN TDG Class / Pack Group: 3 / III	
HAZARD SYMBOLS: 		Hazard Identification Number (HIN): 30	
Note: Transportation information provided is for reference only. Client is urged to consult CFR 49 parts 100 - 177, IMDG, IATA, EU, United Nations TDG, and WHMIS (Canada) TDG information manuals for detailed regulations and exceptions covering specific container sizes, packaging materials and methods of shipping.			

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SECTION 15 - REGULATORY INFORMATION

TSCA (USA - Toxic Substance Control Act): All components of this product are listed.
SARA TITLE III (USA - Superfund Amendments and Reauthorization Act): Immediate health.
 Acute Health: **NO** Chronic Health: **NO**
 Fire: **NO** Sudden Release of Pressure: **NO**
 Reactive: **NO**

SARA 313 REPORTABLE INGREDIENTS: Yes - Triethylene glycol monobutyl ether (CAS# 143-22-6) and Ethylene glycol monophenyl ether (CAS# 122-99-6)

CERCLA (USA - Comprehensive Response Compensation and Liability Act): None
California Prop 65, Safe Drinking Water and Toxic Enforcement Act of 1986: No
CPR (Canadian Controlled Products Regulations): WHMIS Classification: B3, D2B
IDL (Canadian Ingredient Disclosure List): Components of this product identified by CAS number are listed.
DSL / NDSL (Canadian Domestic Substances List / Non-Domestic Substances List): Components of this product identified by CAS number are listed on the DSL or NDSL, or are otherwise in compliance with the New Substances Notification (NSN) regulations.
EINECS (European Inventory of Existing Commercial Chemical Substances): Referenced.

WGK Water Quality Index: 1 **VbK Index:** A III

RISK PHRASES:	SYMBOL(S) REQUIRED FOR EU LABEL	SAFETY PHRASES:
R36/37/38 : Irritating to eyes, respiratory system and skin.	 (+Xi): Irritating	S2 : Keep out of the reach of children. S24/25 : Avoid contact with skin and eyes.


SECTION 16 - OTHER INFORMATION

Legend:

- ACGIH - American Congress of Government Industrial Hygienists**
- CAS - Chemical Abstracts Service**
- EINECS - European Inventory of Existing Commercial Chemical Substances**
- HMIS - Hazardous Materials Identification System**
- IARC - International Agency for Research on Cancer**
- NA - Not Available**
- ND - Not Determined**
- NE - Not Established**
- NR - Not Reported**
- NIOSH - National Institute for Occupational Safety and Health**
- NTP - National Toxicology Program**
- OSHA - Occupational Safety and Health Administration**

HMIS HAZARD RATINGS	HEALTH:		0 = INSIGNIFICANT
	FLAMMABILITY:	1	1 = SLIGHT
	PHYSICAL HAZARD:	2	2 = MODERATE
	PERSONAL PROTECTIVE EQUIPMENT:	0	3 = HIGH
		C	4 = EXTREME

REVISION SUMMARY:
 Revised to GHS/E.U. protocols 6/2/2009 supersedes 12/16/2008 issue. JTV

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The information contained herein is believed to be accurate but is not warranted to be so. Data and calculations are based on information furnished by the manufacturer of the product and manufacturers of the components of the product. Users are advised to confirm in advance of need that information is current, applicable and suited to the circumstances of use. Vendor assumes no responsibility for injury to vendee or third persons proximately caused by the material if reasonable safety procedures are not adhered to as stipulated in the data sheet. Furthermore, vendor assumes no responsibility for injury caused by abnormal use of this material even if reasonable safety procedures are followed. Any questions regarding this product should be directed to the manufacturer of the product as described in Section 1.