

Material Safety Data Sheet



CAWO PLATE CLEANER

CAWO PHOTOCHEMISCHES WERK GMBH

SUBID:000001007221

Version 1

Print Date 04-10-2008

Revision Date 04-09-2008

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Identification of the substance/preparation

Product name : CAWO PLATE CLEANER
MSDS Number : 000001007221
Use of the Substance/Preparation : Emulsion cleaner
Product code : EROZ4

Company/Undertaking Identification

CAWO Photochemisches Werk GmbH
Postfach 1129
86521 Schrobenhausen
Deutschland

Emergency (Belgien) : +32 3 444 3333 (24h/24h)

SECTION 2. COMPOSITION/INFORMATION ON INGREDIENTS

Emulsion cleaner, mainly consisting of:

	<u>CAS-No.</u>	<u>Concentration [%]</u>	
• Stoddard solvent	8052-41-3	>= 10.0	- <= 20.0
• Nitric acid	7697-37-2	>= 1.0	- <= 5.0
• Phosphoric acid	7664-38-2	>= 1.0	- <= 5.0
• Water	7732-18-5	>= 60.0	- <= 80.0
• Sorbitan monooleate	1338-43-8	>= 1.0	- <= 5.0

SECTION 3. HAZARDS IDENTIFICATION

The product as a whole has not been tested. This hazard information is for the individual ingredients.

Emergency Overview

Form : Liquid.
Colour : White.
Odour : Sweetish smell

WARNING !
Combustible.

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May cause respiratory tract irritation. Inhalation may cause nausea or dizziness. May cause skin irritation. Causes eye burns.

Potential Health Effects

Primary Routes of Entry : Eye contact. Skin contact. Inhalation of vapours or mists. Accidental ingestion.

Acute health effects

Inhalation

- Stoddard solvent : May be irritating to the mucous membranes and the respiratory tract with symptoms of coughing and nasal discharge. May cause central nervous system depression with symptoms of headache, nausea, dullness and dizziness.
- Nitric acid : Is expected to be irritating to the respiratory tract with symptoms of coughing, sore throat, and runny nose.
- Phosphoric acid : Is expected to be irritating to the respiratory tract with symptoms of coughing, sore throat, and runny nose.

Skin contact

- Stoddard solvent : Repeated or prolonged skin contact with the solvent can result in dry, defatted and cracked skin causing increased susceptibility to infection. In addition, dermatitis and skin rash and redness may occur from skin contact.
- Nitric acid : Corrosive with symptoms of reddening, itching, swelling, burning and possible permanent damage.
- Phosphoric acid : Corrosive with symptoms of reddening, itching, swelling, burning and possible permanent damage.

Eye contact

- Stoddard solvent : May be irritating to the eyes with symptoms of reddening, tearing and stinging.
- Nitric acid : Corrosive with symptoms of reddening, tearing, swelling, burning and possible permanent damage.
- Phosphoric acid : Can be severely irritating and corrosive to the eyes resulting in burning, reddening, swelling of the eye and surrounding tissue and possibly permanent injury to the cornea.

Ingestion

- Stoddard solvent : Vomiting may cause aspiration of material resulting in chemical pneumonitis. May cause gastrointestinal tract irritation with diarrhea, abdominal pain, vomiting and possibly burns.
- Nitric acid : Corrosive to the digestive tract with symptoms of burning and ulceration.
- Phosphoric acid : Swallowing high concentrations may cause severe injury.

Chronic health hazards

Inhalation

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- Stoddard solvent : Chronic exposure to organic solvents has been associated with various neurotoxic effects, including permanent brain and nervous system damage. Symptoms include loss of memory, loss of intellectual ability and loss of coordination.

Ingestion

- Stoddard solvent : Chronic exposure to organic solvents has been associated with various neurotoxic effects, including permanent brain and nervous system damage. Symptoms include loss of memory, loss of intellectual ability and loss of coordination.

Carcinogenicity

The components of this product are not listed by NTP, IARC or regulated as a carcinogen by OSHA.

SECTION 4. FIRST AID MEASURES

- Eye contact : Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
- Skin contact : Wash immediately with plenty of water and soap. If symptoms persist, seek medical advice.
- Ingestion : Do not induce vomiting. Obtain medical attention.
- Inhalation : Take person to fresh air. If necessary, seek medical advice.

SECTION 5. FIRE-FIGHTING MEASURES

- Suitable extinguishing media : e.g. water, CO₂, foam, powder, sand.
- Special protective equipment for fire-fighters : Firefighters should be equipped with self-contained breathing apparatus to protect against potentially toxic and irritating fumes.
- Additional advice : Water mist may be used to cool closed containers.

SECTION 6. ACCIDENTAL RELEASE MEASURES

- Personal precautions : See section : Exposure controls / personel protection.
- Environmental precautions : For waste disposal see section 13.
- Methods for cleaning up : Dike the spill if necessary. Soak up with absorbent material. Collect large spills into a properly labelled and sealable container. Prevent release into the drain, soil or surface water.
- Additional advice : Wash away residues with plenty of water.

SECTION 7. HANDLING AND STORAGE

Handling

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Advice on protection against fire and explosion : Keep away from heat and sources of ignition. Take precautionary measures against static discharges.
 Advice on safe handling : Handle in accordance with good industrial hygiene and safety practice. Wash thoroughly after handling.

Storage

Storage stability : Stable under recommended storage conditions.
 Advice on common storage : Store away from strong alkalis and oxidizing agents.
 Requirements for storage areas and containers : Keep container tightly closed and in a well-ventilated place. Protect from direct sunlight.

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Limit Values (US)

Components	CAS-No.	Values	Type	Revision Date	Basis
Stoddard solvent	8052-41-3	100 ppm	TWA	2004	ACGIH
		350 mg/m3	REL	06 1997	NIOSH
		1,800 mg/m3	Ceill_Time	06 1997	NIOSH
		2,900 mg/m3	PEL	06 1993	OSHA Z1
Nitric acid	7697-37-2	2 ppm	TWA	2002	ACGIH
		4 ppm	STEL	2002	ACGIH
		5 mg/m3	PEL	06 1993	OSHA Z1
		5 mg/m3	TWA	1989	OSHA Z1A
		10 mg/m3	STEL	1989	OSHA Z1A
Phosphoric acid	7664-38-2	1 mg/m3	TWA	2002	ACGIH
		3 mg/m3	STEL	2002	ACGIH
		1 mg/m3	PEL	06 1993	OSHA Z1
		1 mg/m3	TWA	1989	OSHA Z1A
		3 mg/m3	STEL	1989	OSHA Z1A

Exposure Limit Values (CA)

Components	CAS-No.	Values	Type	Revision Date	Basis
Stoddard solvent	8052-41-3	525 mg/m3	TWA	1994	OEL (QUE)
		572 mg/m3	TWA	10 2003	CAD AB OEL
		525 mg/m3	TWA	09 2000	CAD ON OEL
		290 mg/m3	TWA	03 2004	CAD BC OEL
		580 mg/m3	STEL	03 2004	CAD BC OEL
Nitric acid	7697-37-2	5.2 mg/m3	TWA	2006	OEL (QUE)
		10 mg/m3	STEL	2006	OEL (QUE)
Phosphoric acid	7664-38-2	1 mg/m3	TWA	2006	OEL (QUE)
		3 mg/m3	STEL	2006	OEL (QUE)

Exposure controls

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Hygiene measures	:	General dilution and local exhaust as necessary to control airborne vapors, mists, dusts and thermal decomposition products below appropriate airborne concentration standards/guidelines. Employees should wash their hands and face before eating, drinking, or using tobacco products. Educate and train employees in the safe use and handling of this product. Emergency showers and eye wash stations should be available.
Respiratory protection	:	Under normal conditions of use, respirator protection is not required. If respirators are used, institute a program in accordance with OSHA standard 29CFR1910.134 or Canada CSA Standard Z94.4-02.
Hand protection	:	Use chemical resistant gloves. In case of prolonged immersion or frequently repeated contact use gloves made of: natural latex (thickness >= 0.75 mm, breakthrough time > 10 min). Avoid gloves made of: butyl rubber, nitrile rubber or neoprene.
Eye protection	:	Safety glasses.
Personal protective equipment	:	Employees should wash their hands and face before eating, drinking, or using tobacco products. Educate and train employees in the safe use and handling of this product. Emergency showers and eye wash stations should be available.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Form	:	Liquid.
Colour	:	White.
Odour	:	Sweetish smell
Vapour pressure	:	Not established.
Relative density	:	0.970 at 20 °C (68 °F)
pH (25 °C, 77 °F)	:	0.6
Boiling point/range	:	> 100 °C (> 212 °F)
Flash point	:	44.4 °C (111.9 °F)
VOC content	:	17.4 %
		VOC content excluding water

SECTION 10. STABILITY AND REACTIVITY

Stability	:	The product is stable under normal conditions of storage and use.
Hazardous decomposition products	:	None
Thermal decomposition	:	Not applicable
Conditions to avoid	:	Avoid contact with strong alkalis and oxidizing agents.

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SECTION 11. TOXICOLOGICAL INFORMATION

Toxicity data specific for individual ingredients in their pure state:

Acute oral toxicity

- Stoddard solvent : LD50 rat > 4,000 mg/kg
- Phosphoric acid : LD50 rat 1,530 mg/kg

Acute inhalation toxicity

- Nitric acid : LC50 rat > 0.1 mg// 4 h
- Phosphoric acid : LC50 rat > 0.2 mg// 4 h

Acute dermal toxicity

- Stoddard solvent : LD50 rabbit > 2,000 mg/kg
- Phosphoric acid : LD50 rabbit 2,740 mg/kg

Other Information

Hazard labelling of this preparation: see section 15.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity effects

Ecotoxicity data specific for individual ingredients in their pure state:

Toxicity to daphnia

- Phosphoric acid : Species: Daphnia magna (water flea)
EC50: > 100 mg// 96 h

Toxicity to bacteria

- Phosphoric acid : Species: Pseudomonas putida (bacteria)
EC50: 270 mg// 16 h

SECTION 13. DISPOSAL CONSIDERATIONS

Waste disposal methods

Waste disposal should be in accordance with existing federal, state and local environmental control laws. Discharge to sewer may require approval of permitting authority and may require pretreatment.

Empty containers.

Recondition or dispose of empty container in accordance with governmental regulations.

US. RCRA Hazardous Waste Classification (40 CFR 261)

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When discarded in its purchased form, this product meets the criteria of ignitability, and should be managed as a hazardous waste (EPA Hazardous Waste Number D001). When discarded in its purchased form, this product meets the criteria of corrosivity, and should be managed as a hazardous waste (EPA Hazardous Waste Number D002).

SECTION 14. TRANSPORT INFORMATION

CFR_ROAD

UN-No : 1993
Proper shipping name : Flammable liquids, n.o.s.
Class : 3
Packing group : III
Labelling No. : 3

CFR_RAIL

UN-No : 1993
Proper shipping name : Flammable liquids, n.o.s.
Class : 3
Packing group : III
Labelling No. : 3

CFR_INWTR

UN-No : 1993
Proper shipping name : Flammable liquids, n.o.s.
Class : 3
Packing group : III
Labelling No. : 3

TDG_ROAD

UN-No : 1993
Proper shipping name : Flammable liquid, n.o.s.
Class : 3
Packing group : III
Labelling No. : 3

TDG_RAIL

UN-No : 1993
Proper shipping name : Flammable liquid, n.o.s.
Class : 3
Packing group : III
Labelling No. : 3

TDG_INWTR

UN-No : 1993
Proper shipping name : Flammable liquid, n.o.s.
Class : 3
Packing group : III
Labelling No. : 3

IMO / IMDG

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UN-No : 1993
Proper shipping name : Flammable liquid, n.o.s.
Class : 3
Packing group : III
Labelling No. : 3
EmS : F-E, S-E

ICAO / IATA cargo aircraft only

UN-No : 1993
Proper shipping name : Flammable liquid, n.o.s.
Class : 3
Packing group : III
Labelling No. : 3
Packing instruction : 310

ICAO / IATA passenger and cargo aircraft

UN-No : 1993
Proper shipping name : Flammable liquid, n.o.s.
Class : 3
Packing group : III
Labelling No. : 3
Packing instruction : 309

The DOT 49 CFR173.150(F)(1) states that if the quantity is non bulk packaging (< 119 gallons) the material can be shipped as non-regulated unless the combustibile liquid is a hazardous substance or a hazardous waste.

SECTION 15. REGULATORY INFORMATION

US. Toxic Substances Control Act (TSCA)

All of the components of this product are listed on the TSCA Inventory.

US. OSHA Classification

This product is hazardous under the criteria of the Federal OSHA Hazard Communication Standard 29 CFR 1910.1200.

US. EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III Section 302 Extremely Hazardous Substance (40 CFR 355, Appendix A)

- Nitric acid : Threshold Planning Quantity: 1,000 lbs

US. SARA 311/312 Hazard Categories

Immediate Health Hazard. Fire Hazard.

US. EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III Section 313 Toxic Chemicals (40 CFR 372.65) - Supplier Notification Required

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- Nitric acid : De minimis concentration: 1.0 %
- : Reportable threshold: 10,000 lbs
- : Reportable threshold: 25,000 lbs

US. EPA CERCLA Hazardous Substances (40 CFR 302)

- Nitric acid : Reportable quantity: 1,000 lbs
- Phosphoric acid : Reportable quantity: 5,000 lbs

US. California Prop. 65

This product does not contain any chemicals known to State of California to cause cancer, birth defects or any other harm.

State Right-to-Know Information

The following chemicals are specifically listed by individual states. Other product specific health and safety data in other sections of the MSDS may also be applicable for state requirements. For details on your regulatory requirements you should contact the appropriate agency in your state.

US. Massachusetts Commonwealth's Right-to-Know Law (Appendix A to 105 Code of Massachusetts Regulations Section 670.000)

	<u>CAS-No.</u>	<u>Concentration [%]</u>	
• Nitric acid	7697-37-2	>= 1.0	<= 5.0
• Phosphoric acid	7664-38-2	>= 1.0	<= 5.0

US. New Jersey Worker and Community Right-to-Know Act (New Jersey Statute Annotated Section 34:5A-5)

	<u>CAS-No.</u>	<u>Concentration [%]</u>	
• Phosphoric acid	7664-38-2	>= 1.0	<= 5.0

US. Pennsylvania Worker and Community Right-to-Know Law (34 Pa. Code Chap. 301-323)

	<u>CAS-No.</u>	<u>Concentration [%]</u>	
• Nitric acid	7697-37-2	>= 1.0	<= 5.0
• Phosphoric acid	7664-38-2	>= 1.0	<= 5.0

US. Rhode Island Hazardous Substances Right-to-Know Act (R.I. Gen. Laws Section 28-21-1 et. seq.)

	<u>CAS-No.</u>	<u>Concentration [%]</u>	
• Nitric acid	7697-37-2	>= 1.0	<= 5.0
• Phosphoric acid	7664-38-2	>= 1.0	<= 5.0

US. Massachusetts, New Jersey, Pennsylvania or Rhode Island Right to Know Substance Lists : See Section 2.

Canadian WHMIS Classification

- B3 : Combustible Liquid
- D2B : Toxic Material Causing Other Toxic Effects

Canadian Environmental Protection Act (CEPA)

All components of this product are on the Canadian DSL list.

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SECTION 16. OTHER INFORMATION

US. HMIS Rating

Health	:	2
Flammability	:	2
Reactivity	:	0

(0 = Minimal, 1 = Slight, 2 = Moderate, 3 = Serious, 4 = Severe)

US. NFPA 704M Rating

Health	:	2
Flammability	:	2
Reactivity	:	0

(0 = Insignificant, 1 = Slight, 2 = Moderate, 3 = High, 4 = Extreme)