



Yellow Fever

MSDS Number: H698061

Revision Date: December 20, 2013

Page 1 of 6

1 PRODUCT AND COMPANY IDENTIFICATION

Manufacturer

Kärcher North America, Inc.
325 S Price Road
Chandler, AZ 85224

Phone: 360-833-1600
Fax: 360-833-9200
Email: info@karcherna.com
Web: www.karcher.com

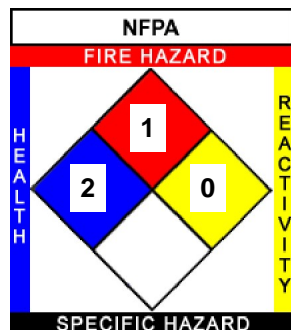
Product Name: Yellow Fever
Revision Date: December 20, 2013
Version: 45-47F
MSDS Number: H698061

Emergency Information: INFOTRAC 1-800-535-5053 International 1-352-323-3500

2 HAZARDS IDENTIFICATION

- Route of Entry:** Eyes, Skin, Inhalation:
Target Organs: Eyes; Skin; Respiratory system;
Inhalation: Can cause irritation and inflammation of the respiratory tract.
Skin Contact: Irritating to skin; may cause burns, blisters and itching.
Eye Contact: Irritating to eyes, eye damage may occur.
Ingestion: Irritating to intestinal tract; may cause burns, vomiting, stomach pain, and disorientation.

NFPA: Health = 2, Fire = 1, Reactivity = 0
 HMIS III: H2/F1/PH0



HMIS III	
HEALTH	2
FLAMMABILITY	1
PHYSICAL HAZARDS	0
PERSONAL PROTECTION B Safety Glasses, Gloves	

PERSONAL PROTECTION INDEX													
A	Goggles	G	Goggles + Gloves + Respirator										
B	Goggles + Gloves	H	Goggles + Gloves + Apron + Respirator										
C	Goggles + Gloves + Apron	I	Goggles + Gloves + Respirator										
D	Respirator + Gloves + Apron	J	Goggles + Gloves + Apron + Respirator										
E	Goggles + Gloves + Face Shield	K	Respirator + Gloves + Apron + Boots										
F	Goggles + Gloves + Apron + Respirator	X	Consult your supervisor or S.O.P. for "SPECIAL" handling directions										
A	Safety Glasses	n	Splash Goggles	O	Face Shield & Eye Protection	p	Gloves	q	Boots	r	Synthetic Apron	S	Full Suit
t	Dust Respirator	U	Vapor Respirator	w	Dust & Vapor Respirator	y	Full Face Respirator	Z	Airline Hood or Mask	Additional Information			

GHS Hazard Pictograms:





Yellow Fever

MSDS Number: H698061

Revision Date: December 20, 2013

Page 2 of 6

GHS Classifications:

- Health, Acute toxicity, 4 Oral
- Health, Acute toxicity, 4 Dermal
- Health, Serious Eye Damage/Eye Irritation, 1

GHS Phrases:

- Warning, H302 - Harmful if swallowed
- Warning, H312 - Harmful in contact with skin
- Danger, H318 - Causes serious eye damage

GHS Precautionary Statements:

- Wash thoroughly after handling.
 - Do not eat, drink or smoke when using this product.
 - Wear protective gloves/protective clothing/eye protection/face protection.
 - IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
 - IF ON SKIN: Wash with soap and water.
 - IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do.
- Continue rinsing.
- Wash contaminated clothing before reuse.

3 HAZARDS IDENTIFICATION

Ingredients:

CAS #	Percentage	Chemical Name
77-92-9	<5%	Citric Acid
7664-38-2	<8%	Phosphoric acid
1341-49-7	<4%	Ammonium bifluoride
7664-93-9	<13%	Sulfuric acid
111-76-2	<4%	Ethylene glycol monobutyl ether

OSHA Regulatory Status:

This SDS contains valuable information critical to the safe handling and proper use of this product. This SDS should be retained and available for employees and other users of this product.

4 FIRST AID MEASURES

- Inhalation:** Remove from exposure and get fresh air. Keep warm and at rest. Get medical attention immediately if artificial respiration is required.
- Skin Contact:** Remove contaminated clothing, jewelry and shoes immediately. Flush affected area with large amounts of water, then use soap or mild detergent and large amounts of water for 15-20 minutes to cleanse area. If skin is severely irritated or burned, get medical attention immediately.
- Eye Contact:** Immediately flush eyes with large amounts of water occasionally lifting upper and lower lids for at least 15 minutes. Get immediate medical attention.
- Ingestion:** Rinse mouth with water. DO NOT INDUCE VOMITING unless instructed to by medical personnel. If vomiting occurs keep head lower than hips to help prevent aspiration. If person is unconscious, do not induce vomiting; turn their head to the side. Never make an unconscious person vomit or drink fluids. Get medical attention.

5 FIRE FIGHTING MEASURES

- Flash Point:** 100 °C / 212 °F
- Flash Point Method:** Closed Cup



Yellow Fever

MSDS Number: H698061

Revision Date: December 20, 2013

Page 3 of 6

Wear self-contained breathing apparatus and other protective clothing. Use any standard agent - choose the one most appropriate for type of surrounding fire.

6 ACCIDENTAL RELEASE MEASURES

Isolate area; keep unnecessary personnel away. Do not discharge into drains. Ventilate closed spaces before entering. Prevent further leakage or spillage if safe to do so. Prevent entry into waterways, sewers, basements or confined areas. Wear appropriate protective equipment and clothing during cleanup. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal.

7 HANDLING AND STORAGE

Handling Precautions: Do not get in eyes, on skin, or on clothing. Do not breathe vapor. Keep container closed. Promptly clean up spills. Wash thoroughly after handling.

Storage Requirements: Store out of reach of children; keep container closed; store in a cool, well-ventilated place.

8 EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls: Normal room ventilation is satisfactory for limited use.

Personal Protective Equip: HMIS PP, B | Safety glasses, Gloves

Sodium Hydroxide 1310-73-2 OSHA PEL 2 mg/m³

Ethylene glycol butyl ether 111-76-2 OSHA PEL 50 ppm - 240 mg/m³

9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Clear yellow

Physical State: Liquid

Spec Grav./Density: 9.31 lb/gal

pH: 2.45 @ 5% solution

Odor: Sharp

Solubility: Soluble

10 STABILITY AND REACTIVITY

Stability: Product is stable under normal conditions.

Conditions to Avoid: None Known

Materials to Avoid: Strong oxidizing or acidic materials

Hazardous Decomposition: Exposure to fire may liberate carbon dioxide, carbon monoxide, organic acids, and other unidentified thermal decomposition products from this product or its packaging.

Hazardous Polymerization: Will not occur.

11 TOXICOLOGICAL INFORMATION

Toxicity Data:

Citric Acid 77-92-9

Oral (LD 50): 3000 mg/kg - Rat



Yellow Fever

MSDS Number: H698061

Revision Date: December 20, 2013

Page 4 of 6

Inhalation (LC 50): Not Listed on RTECS

Skin irritation: Mild

Eye irritation: Severe

Sensitization: Not considered an occupational sensitizer

Phosphoric Acid 7664-38-2

Oral (LD 50): 1200 mg/kg - Rat

Inhalation (LC 50): 25.5 mg/m³ - rat

Skin irritation: Severe

Eye irritation: Severe

Sensitization: Not considered an occupational sensitizer

Ammonium Bifluoride 134-14-97

Oral (LD 50): Not Listed on RTECS

Inhalation (LC 50): Not Listed on RTECS

Skin irritation: Mild

Eye irritation: Severe

Sensitization: Not considered an occupational sensitizer

Sulfuric acid 7664-93-9

Oral (LD 50): 350 mg/kg - Rat

Inhalation (LC 50): 510 mg/m³/2H - Rat

Skin irritation: Severe - Rabbit

Eye irritation: Severe - Rabbit

Sensitization: Not considered an occupational sensitizer

Ethylene glycol butyl ether 111-76-2

Oral (LD 50): 917 mg/kg - Rat

Inhalation (LC 50): 2900 mg/m³/7H - Rat

Skin irritation: Mild

Eye irritation: Mild

Sensitization: Not considered an occupational sensitizer



Yellow Fever

MSDS Number: H698061

Revision Date: December 20, 2013

Page 5 of 6

12 ECOLOGICAL INFORMATION

On the basis of available information, this material is not expected to produce any significant environmental effects when recommended use instructions are followed.

13 DISPOSAL CONSIDERATIONS

Dispose of in accordance with all applicable regulations.

14 TRANSPORT INFORMATION

UN1760 Corrosive Liquids, n.o.s., (Sulfuric acid), 8, II Ship in accordance with 49 CFR parts 100-185.

15 REGULATORY INFORMATION

COMPONENT / (CAS/PERCENT) / CODES

*Citric Acid (77929 <5%) TSCA, WHMIS

*Phosphoric acid (7664382 <8%) CERCLA, CSWHS, EPCRAWPC, MASS, NJHS, OSHAWAC, SARA313, TSCA, TXAIR, WHMIS

*Ammonium bifluoride (1341497 <4%) CERCLA, CSWHS, MASS, PA, TSCA

*Sulfuric acid (7664939 <13%) CERCLA, CSWHS, EHS302, EPCRAWPC, MASS, NJHS, OSHAWAC, PA, SARA313, TSCA, TXAIR, WHMIS

*Ethylene glycol monobutyl ether (111762 <4%) MASS, OSHAWAC, PA, TSCA, TXAIR, WHMIS

REGULATORY KEY DESCRIPTIONS

All components are listed on TSCA

CERCLA = Superfund clean up substance

CSWHS = Clean water Act Hazardous substances

EHS302 = Extremely Hazardous Substance

EPCRAWPC = EPCRA Water Priority Chemicals

MASS = MA Massachusetts Hazardous Substances List

NJHS = NJ Right-to-Know Hazardous Substances

OSHA = OSHA workplace Air Contaminants

PA = PA Right-To-Know List of Hazardous Substances

SARA313 = SARA 313 Title III Toxic Chemicals

TXAIR = TX Air Contaminants with Health Effects Screening Level

WHMIS = Workplace Haz Mat Info Sys Canada



Yellow Fever

MSDS Number: H698061

Revision Date: December 20, 2013

Page 6 of 6

16

OTHER INFORMATION

This document is prepared in accordance with 29 CFR 1910.1200. The purpose of this section is to ensure that the hazards of all chemicals produced or imported are evaluated, and that information concerning their hazards is transmitted to employers and employees.

All information appearing herein is based upon data obtained from the raw material manufacturer and/or recognized technical sources. While the information above is believed to be true and accurate, the author makes no representations as to its accuracy or sufficiency. Conditions of use are beyond the manufacturer's control; therefore the users are responsible to verify this data under their own particular conditions, applications and regulations to determine if the product is suitable for their particular purposes. The users assume all risks of product use, handling, disposal, reliance upon, publication or use of the information contained herein. This information applies only to the product designated above and does not necessarily apply to its use in combination with other materials, products, chemical compounds, structures or processes.

Prepared by: EHS Manager