



Revision Number: 002.5

Issue date: 12/11/2013

## 1. PRODUCT AND COMPANY IDENTIFICATION

**Product name:** REAGENT SOLUTION 46 (500ML) **IDH number:** 592436  
**Product type:** Auxiliary product **Region:** United States  
**Company address:** **Contact information:**  
 Henkel Corporation Telephone: 248.583.9300  
 32100 Stephenson Highway For Chemical Emergency: Call CHEMTREC at 800.424.9300  
 Madison Heights, MI 48071 Internet: www.henkelna.com

## 2. HAZARDS IDENTIFICATION

### EMERGENCY OVERVIEW

<b>Physical state:</b> Liquid	<b>HMIS:</b>	<b>HEALTH:</b> *3
<b>Color:</b> Colorless		<b>FLAMMABILITY:</b> 0
<b>Odor:</b> Sharp		<b>PHYSICAL HAZARD:</b> 1
	<b>Personal Protection:</b>	See MSDS Section 8

**DANGER—OXIDIZER!:** CORROSIVE!  
 CAUSES EYE, SKIN AND RESPIRATORY TRACT BURNS.  
 HARMFUL IF SWALLOWED OR INHALED.

**Relevant routes of exposure:** Skin, Inhalation, Eyes

### Potential Health Effects

**Inhalation:** Mists, vapors or liquid may cause severe irritation or burns.  
**Skin contact:** Corrosive to the skin. Contact with the skin or mucous membranes may cause severe irritation and burns.  
**Eye contact:** This product is severely irritating to the eyes and may cause irreversible damage including burns and blindness.  
**Ingestion:** This product may produce corrosive damage to the gastrointestinal tract if it is swallowed.

**Existing conditions aggravated by exposure:** Eye, skin and respiratory disorders. Central and/or peripheral nervous system disorders.

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

See Section 11 for additional toxicological information.

## 3. COMPOSITION / INFORMATION ON INGREDIENTS

Hazardous components	CAS NUMBER	%
Hydrogen peroxide	7722-84-1	10 - 30

## 4. FIRST AID MEASURES

**Inhalation:** If mist or vapor of this product is inhaled, remove person immediately to fresh air. Seek medical attention if symptoms develop or persist.  
**Skin contact:** Remove contaminated clothing and footwear. For skin contact, flush with large amounts of water. Seek immediate medical attention.

<b>Eye contact:</b>	In case of contact with the eyes, rinse immediately with plenty of water for 15 minutes, and seek immediate medical attention.
<b>Ingestion:</b>	Seek medical advice. Do not induce vomiting. Give one to two glasses of water or milk. Never give anything by mouth to a victim who is unconscious or is having convulsions.
<b>Notes to physician:</b>	If the product is ingested, probable mucosal damage may contraindicate the use of gastric lavage. Treat the affected person appropriately. A nasogastric or orogastric tube may be required for the reduction of severe distension due to gas formation.

## 5. FIRE FIGHTING MEASURES

<b>Flash point:</b>	Not applicable
<b>Autoignition temperature:</b>	Not applicable
<b>Flammable/Explosive limits - lower:</b>	Not applicable
<b>Flammable/Explosive limits - upper:</b>	Not applicable
<b>Extinguishing media:</b>	Water spray or fog.
<b>Special firefighting procedures:</b>	Wear full protective clothing. Wear self-contained breathing apparatus.
<b>Unusual fire or explosion hazards:</b>	This product is an aqueous mixture which will not burn. Decomposition can release oxygen which supports combustion and reduces the effectiveness of suffocation type fire extinguishers. Oxidizing agent, may cause spontaneous ignition of combustible materials.
<b>Hazardous combustion products:</b>	Irritating and toxic gases or fumes may be released during a fire.

## 6. ACCIDENTAL RELEASE MEASURES

Use personal protection recommended in Section 8, isolate the hazard area and deny entry to unnecessary and unprotected personnel.

<b>Environmental precautions:</b>	Prevent further leakage or spillage if safe to do so. Wear appropriate protective equipment and clothing during clean-up. Eliminate all sources of ignition or flammables that may come into contact with a spill of this material.
<b>Clean-up methods:</b>	Absorb spill with inert material. Shovel material into appropriate container for disposal. Dispose of according to Federal, State and local governmental regulations.

## 7. HANDLING AND STORAGE

<b>Handling:</b>	Avoid contact with eyes, skin and clothing. Avoid contamination which can cause rapid decomposition, generating large quantities of oxygen. Keep away from heat, spark and flame. Wash thoroughly after handling. For industrial use only. Clothing or other material wet with this product and allowed to dry may become flammable. Do not return unused product to original container.
<b>Storage:</b>	Keep container tightly closed and in a cool, well-ventilated place away from incompatible materials. Remove all sources of ignition. Do not store around flammable or combustible materials. Vent container carefully, as needed to relieve pressure.

For information on product shelf life, please review labels on container or check the Technical Data Sheet.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Employers should complete an assessment of all workplaces to determine the need for, and selection of, proper exposure controls and protective equipment for each task performed.

Hazardous components	ACGIH TLV	OSHA PEL	AIHA WEEL	OTHER
Hydrogen peroxide	1 ppm TWA	1 ppm (1.4 mg/m <sup>3</sup> ) PEL	None	None

### Engineering controls:

Provide local and general exhaust ventilation to effectively remove and prevent buildup of any vapors or mists generated from the handling of this product.

### Respiratory protection:

Respirators should be selected by and used under the direction of a trained health and safety professional following requirements found in OSHA's respirator standard (29 CFR 1910.134) and ANSI's standard for respiratory protection (Z88.2-1992). A written respiratory protection program, including provisions for medical certification, training, fit testing, exposure assessments, maintenance, inspection, cleaning, and convenient, sanitary storage must be implemented. If concentrations are below the TLV and/or PEL, a NIOSH approved disposable dust/mist respirator may be used for personal comfort. For concentrations above the TLV and/or PEL but less than 10 times these limits, a NIOSH approved half-facepiece respirator equipped with dust-mist cartridges may be used. For concentrations greater than 10 times these limits, consult the NIOSH respirator decision logic found in Publication No. 87-116 or ANSI Z88.2-1992.

### Eye/face protection:

Wear chemical goggles; face shield (if splashing is possible).

### Skin protection:

Chemical resistant, impermeable gloves. Gloves should be tested to determine suitability for prolonged contact. Suitable glove materials may include: Neoprene gloves. Nitrile gloves. Use of impervious apron and boots are recommended.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state:	Liquid
Color:	Colorless
Odor:	Sharp
Odor threshold:	Not available.
pH:	2.9
Vapor pressure:	Not determined
Boiling point/range:	> 100 °C (> 212°F)
Melting point/ range:	Not available.
Specific gravity:	1.1 - 1.2
Vapor density:	Not determined
Flash point:	Not applicable
Flammable/Explosive limits - lower:	Not applicable
Flammable/Explosive limits - upper:	Not applicable
Autoignition temperature:	Not applicable
Evaporation rate:	Not determined
Solubility in water:	Complete
Partition coefficient (n-octanol/water):	Not determined
VOC content:	Not applicable

## 10. STABILITY AND REACTIVITY

<b>Stability:</b>	Stable at normal conditions.
<b>Hazardous reactions:</b>	Will not occur.
<b>Hazardous decomposition products:</b>	Product may decompose and release oxygen, steam, peroxide vapor and heat.
<b>Incompatible materials:</b>	This product may react with strong oxidizing agents. This product may react with strong reducing agents. May react with metals, combustible material and porous materials, especially wood, soil and asbestos.
<b>Conditions to avoid:</b>	None identified.

## 11. TOXICOLOGICAL INFORMATION

Hazardous components	NTP Carcinogen	IARC Carcinogen	OSHA Carcinogen (Specifically Regulated)
Hydrogen peroxide	No	No	No

Hazardous components	Health Effects/Target Organs
Hydrogen peroxide	Central nervous system, Corrosive, Irritant, Mutagen, Skin

## 12. ECOLOGICAL INFORMATION

<b>Ecological information:</b>	Not available.
--------------------------------	----------------

## 13. DISPOSAL CONSIDERATIONS

Information provided is for unused product only.

<b>Recommended method of disposal:</b>	Dispose of according to Federal, State and local governmental regulations.
<b>Hazardous waste number:</b>	This product, if discarded, may be characterized as a RCRA corrosive waste, D002.

## 14. TRANSPORT INFORMATION

### U.S. Department of Transportation Ground (49 CFR)

<b>Proper shipping name:</b>	Hydrogen, peroxide, aqueous solutions
<b>Hazard class or division:</b>	5.1 (8)
<b>Identification number:</b>	UN 2014
<b>Packing group:</b>	II

### International Air Transportation (ICAO/IATA)

<b>Proper shipping name:</b>	Hydrogen peroxide, aqueous solution
<b>Hazard class or division:</b>	5.1 (8)
<b>Identification number:</b>	UN 2014
<b>Packing group:</b>	II

### Water Transportation (IMO/IMDG)

<b>Proper shipping name:</b>	HYDROGEN PEROXIDE, AQUEOUS SOLUTION
<b>Hazard class or division:</b>	5.1 (8)
<b>Identification number:</b>	UN 2014
<b>Packing group:</b>	II

## 15. REGULATORY INFORMATION

### United States Regulatory Information

<b>TSCA 8 (b) Inventory Status:</b>	All components are listed or are exempt from listing on the Toxic Substances Control Act Inventory.
<b>TSCA 12 (b) Export Notification:</b>	None above reporting de minimis
<b>CERCLA/SARA Section 302 EHS:</b>	Hydrogen peroxide (CAS# 7722-84-1).
<b>CERCLA/SARA Section 311/312:</b>	Immediate Health, Delayed Health, Reactive
<b>CERCLA/SARA Section 313:</b>	None above reporting de minimis
<b>California Proposition 65:</b>	No California Proposition 65 listed chemicals are known to be present.

### Canada Regulatory Information

<b>CEPA DSL/NDL Status:</b>	All components are listed on or are exempt from listing on the Canadian Domestic Substances List.
<b>WHMIS hazard class:</b>	C, D.2.B, E

## 16. OTHER INFORMATION

**This material safety data sheet contains changes from the previous version in sections:** New information added in Section(s): 8

**Prepared by:** Jennifer Mckay, Regulatory Affairs Specialist

**DISCLAIMER:** The data contained herein are furnished for information only and are believed to be reliable. However, Henkel Corporation and its affiliates ("Henkel") does not assume responsibility for any results obtained by persons over whose methods Henkel has no control. It is the user's responsibility to determine the suitability of Henkel's products or any production methods mentioned herein for a particular purpose, and to adopt such precautions as may be advisable for the protection of property and persons against any hazards that may be involved in the handling and use of any Henkel's products. In light of the foregoing, Henkel specifically disclaims all warranties, express or implied, including warranties of merchantability and fitness for a particular purpose, arising from sale or use of Henkel's products. Henkel further disclaims any liability for consequential or incidental damages of any kind, including lost profits.