



Allied Pressroom Products  
Chemicals for the International Printing Industry

## SAFETY DATA SHEET RELIEF (USA)

### 1. Identification

#### Product identifier

Product name RELIEF (USA)

#### Recommended use of the chemical and restrictions on use

Application For use as a calcium deposit remover in the lithographic printing industry. Calcium deposit remover.

Uses advised against No specific uses advised against are identified.

#### Details of the supplier of the safety data sheet

Supplier ALLIED PRESSROOM PRODUCTS  
2040 Lee Street  
Hollywood  
FL 33020  
USA  
+1 800-327-8487 (09:00-17:00 EST)  
+1 954-923-6462  
info@alliedchem.com

Manufacturer Same as supplier

#### Emergency telephone number

Emergency telephone 24 HR. EMERGENCY TELEPHONE 800-424-9300 CHEMTREC Allied Pressroom Products  
+1 800-327-8487 (09:00-17:00 EST)

National emergency telephone number 911

### 2. Hazard(s) identification

#### Classification of the substance or mixture

##### Physical hazards

Not Classified

##### Health hazards

Skin Corr. 1B - H314 Eye Dam. 1 - H318

##### Environmental hazards

Not Classified

##### Human health

Corrosive to skin and eyes. The product contains small amounts of organic solvents. Symptoms following overexposure may include the following: Dizziness. Central nervous system depression.

#### Label elements

##### Pictogram



Signal word Danger

**RELIEF (USA)****Hazard statements**

H314 Causes severe skin burns and eye damage.

**Precautionary statements**

P260 Do not breathe vapor/spray.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310 Immediately call a POISON CENTER/doctor.

P501 Dispose of contents/container in accordance with national regulations.

**Contains**

Glycolic acid

**Other hazards**

This substance is not classified as PBT or vPvB according to current EU criteria.

**3. Composition/information on ingredients****Mixtures**

<b>Glycolic acid</b> CAS number: 79-14-1	<b>1-5%</b>
<b>Classification</b> Acute Tox. 4 - H332 Skin Corr. 1B - H314 Eye Dam. 1 - H318	
<b>2-BUTOXYETHANOL</b> CAS number: 111-76-2	<b>1-5%</b>
<b>Classification</b> Flam. Liq. 4 - H227 Acute Tox. 4 - H302 Acute Tox. 4 - H312 Acute Tox. 4 - H332 Skin Irrit. 2 - H315 Eye Irrit. 2A - H319	

The Full Text for all Hazard Statements are Displayed in Section 16.

**4. First-aid measures****Description of first aid measures****Inhalation**

Move affected person to fresh air at once. Get medical attention if any discomfort continues.

**Ingestion**

Do not induce vomiting. Rinse mouth thoroughly with water. Give plenty of water to drink. Get medical attention if any discomfort continues.

**Skin Contact**

Remove affected person from source of contamination. Wash skin thoroughly with soap and water. Get medical attention if symptoms are severe or persist after washing.

**Eye contact**

Remove any contact lenses and open eyelids wide apart. Rinse immediately with plenty of water. Continue to rinse for at least 15 minutes. Get medical attention if any discomfort continues.

## RELIEF (USA)

### Most important symptoms and effects, both acute and delayed

#### **Inhalation**

In case of overexposure, organic solvents may depress the central nervous system causing dizziness and intoxication, and at very high concentrations unconsciousness and death.

#### **Ingestion**

May cause discomfort if swallowed. May cause chemical burns in mouth, esophagus and stomach.

#### **Skin contact**

Corrosive. Chemical burns.

#### **Eye contact**

This product is corrosive. May cause chemical eye burns.

### Indication of immediate medical attention and special treatment needed

#### **Notes for the doctor**

No specific recommendations.

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### 5. Fire-fighting measures

#### Extinguishing media

##### **Suitable extinguishing media**

The product is not flammable. Use fire-extinguishing media suitable for the surrounding fire.

#### Special hazards arising from the substance or mixture

##### **Specific hazards**

No unusual fire or explosion hazards noted.

##### **Hazardous combustion products**

Thermal decomposition or combustion products may include the following substances: Oxides of carbon. Oxides of nitrogen. Toxic gases or vapors.

#### Advice for firefighters

##### **Special protective equipment for firefighters**

Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.

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### 6. Accidental release measures

#### Personal precautions, protective equipment and emergency procedures

##### **Personal precautions**

Wear protective clothing as described in Section 8 of this safety data sheet.

#### Environmental precautions

##### **Environmental precautions**

Avoid discharge into drains or watercourses or onto the ground.

#### Methods and material for containment and cleaning up

##### **Methods for cleaning up**

Wash thoroughly after dealing with a spillage. Absorb in vermiculite, dry sand or earth and place into containers.

##### **Reference to other sections**

For waste disposal, see Section 13.

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### 7. Handling and storage

#### Precautions for safe handling

##### **Usage precautions**

Avoid spilling. Avoid contact with skin and eyes.

#### Conditions for safe storage, including any incompatibilities

##### **Storage precautions**

## RELIEF (USA)

Store in tightly-closed, original container in a dry, cool and well-ventilated place.

### Storage class

Corrosive storage.

### Specific end uses(s)

#### Specific end use(s)

The identified uses for this product are detailed in Section 1.2.

## 8. Exposure Controls/personal protection

### Control parameters

### Occupational exposure limits

#### 2-BUTOXYETHANOL

Long-term exposure limit (8-hour TWA): ACGIH 20 ppm

A3

Long-term exposure limit (8-hour TWA): OSHA 50 ppm 240 mg/m<sup>3</sup>

Sk

ACGIH = American Conference of Governmental Industrial Hygienists.

A3 = Confirmed Animal Carcinogen with Unknown Relevance to Humans.

OSHA = Occupational Safety and Health Administration.

Sk = Danger of cutaneous absorption.

#### 2-BUTOXYETHANOL (CAS: 111-76-2)

#### Immediate danger to life and health

700 ppm

### Exposure controls

#### Protective equipment



#### Appropriate engineering controls

No specific ventilation requirements.

#### Eye/face protection

Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. The following protection should be worn: Chemical splash goggles.

#### Hand protection

Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. It is recommended that gloves are made of the following material: Nitrile rubber.

#### Other skin and body protection

Wear appropriate clothing to prevent any possibility of skin contact.

#### Hygiene measures

Wash hands at the end of each work shift and before eating, smoking and using the toilet. Wash promptly if skin becomes contaminated. Promptly remove any clothing that becomes contaminated. Use appropriate skin cream to prevent drying of skin. When using do not eat, drink or smoke. Do not smoke in work area.

#### Respiratory protection

No specific recommendations. Respiratory protection may be required if excessive airborne contamination occurs.

## 9. Physical and Chemical Properties

### Information on basic physical and chemical properties

#### Appearance

Clear liquid.

**RELIEF (USA)****Color**

Colorless to pale yellow.

**Odor**

Slight. Glycol ether.

**Odor threshold**

No information available.

**pH**

pH (concentrated solution): 2.2 - 2.4

**Melting point**

Not applicable.

**Initial boiling point and range**

100°C @ 760 mm Hg

**Flash point**

> 200°F TCC (Tag closed cup).

**Evaporation rate**

< 1 (butyl acetate = 1)

**Upper/lower flammability or explosive limits**

No information available. : :

**Vapour pressure**

No information available.

**Vapour density**

>1

**Relative density**

1 @ 20°C

**Bulk density**

Not applicable.

**Solubility(ies)**

Soluble in water.

**Partition coefficient**

No information available.

**Auto-ignition temperature**

No information available.

**Decomposition Temperature**

No information available.

**Viscosity**

No information available.

**Oxidising properties**

Not available.

**Comments**

Information declared as "Not available" or "Not applicable" is not considered to be relevant to the implementation of the proper control measures.

**Volatile organic compound**

This product contains a maximum VOC content of 29 g/litre. This product contains a maximum VOC content of 0.24 lb per Gallon.

**10. Stability and reactivity****Reactivity**

There are no known reactivity hazards associated with this product.

## RELIEF (USA)

### Stability

Stable at normal ambient temperatures.

### Possibility of hazardous reactions

Will not polymerize.

### Conditions to avoid

Avoid excessive heat for prolonged periods of time.

### Materials to avoid

Strong alkalis. Strong oxidizing agents. Strong reducing agents.

### Hazardous decomposition products

Fire creates: Carbon monoxide (CO). Carbon dioxide (CO<sub>2</sub>). Nitrous gases (NO<sub>x</sub>).

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## 11. Toxicological information

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### Information on toxicological effects

#### Acute toxicity - oral

Based on available data the classification criteria are not met.

#### **ATE oral (mg/kg)**

48,634.00182639

#### Acute toxicity - dermal

Based on available data the classification criteria are not met.

#### **ATE dermal (mg/kg)**

41151.84769926

#### Acute toxicity - inhalation

Based on available data the classification criteria are not met.

#### **ATE inhalation (gases ppm)**

74135.9821955

#### **ATE inhalation (vapours mg/l)**

181.22128981

#### **ATE inhalation (dusts/mists mg/l)**

24.71199407

#### Skin corrosion/irritation

##### **Extreme pH**

≤ 2 Corrosive to skin.

#### Serious eye damage/irritation

Corrosivity to eyes is assumed.

#### Respiratory sensitisation

Based on available data the classification criteria are not met.

#### Skin sensitisation

Based on available data the classification criteria are not met.

#### Germ cell mutagenicity

##### **Genotoxicity - in vitro**

Does not contain any substances known to be mutagenic.

#### Carcinogenicity

Does not contain any substances known to be carcinogenic.

#### Reproductive toxicity

##### **Reproductive toxicity - fertility**

## RELIEF (USA)

Does not contain any substances known to be toxic to reproduction.

### **Specific target organ toxicity - single exposure**

#### **STOT - single exposure**

Based on available data the classification criteria are not met.

### **Specific target organ toxicity - repeated exposure**

#### **STOT - repeated exposure**

Based on available data the classification criteria are not met.

### **Aspiration hazard**

Not applicable.

### **Inhalation**

The product contains organic solvents. Overexposure may depress the central nervous system, causing dizziness and intoxication.

### **Ingestion**

May cause discomfort if swallowed.

### **Skin Contact**

Contains components which may penetrate the skin. This product is corrosive. Prolonged contact may cause burns.

### **Eye contact**

This product is corrosive. Causes serious eye damage.

### **Route of entry**

Skin and/or eye contact Inhalation Skin absorption

### **Medical Symptoms**

Irritation of eyes and mucous membranes. Central nervous system depression. Drowsiness, dizziness, disorientation, vertigo. Intoxication. May cause blurred vision and serious eye damage. Chemical burns.

## **12. Ecological Information**

### **Ecotoxicity**

Not known. The product components are not classified as environmentally hazardous. However, large or frequent spills may have hazardous effects on the environment. The product may affect the acidity (pH) of water which may have hazardous effects on aquatic organisms.

### **Toxicity**

#### **Acute toxicity - fish**

Not known.

#### **Acute toxicity - aquatic invertebrates**

Not known.

#### **Acute toxicity - aquatic plants**

Not known.

### **Persistence and degradability**

#### **Persistence and degradability**

This cleaning preparation does not contain any surfactants. There are no data on the degradability of this product.

### **Bioaccumulative potential**

No data available on bioaccumulation.

### **Partition coefficient**

No information available.

### **Mobility in soil**

#### **Mobility**

The product is soluble in water.

**RELIEF (USA)****Results of PBT and vPvB assessment**

This substance is not classified as PBT or vPvB according to current EU criteria.

**Other adverse effects**

Not known.

**13. Disposal considerations****Waste treatment methods****General information**

When handling waste, the safety precautions applying to handling of the product should be considered.

**Disposal methods**

Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

**14. Transport information****UN Number**

UN No. (DOT)	3265
UN No. (IMDG)	3265
UN No. (ICAO)	3265

**UN proper shipping name**

Proper shipping name (DOT)	CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (CONTAINS GLYCOLIC ACID)
Proper shipping name (IMDG)	CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (CONTAINS GLYCOLIC ACID)
Proper shipping name (ICAO)	CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (CONTAINS GLYCOLIC ACID)

**Transport hazard class(es)**

IMDG Class	8
ICAO class/division	8

**Transport labels****Packing group**

DOT pack group	III
IMDG packing group	III
ICAO packing group	III

**Environmental hazards****Environmentally Hazardous Substance**

No.

**Special precautions for user**

EmS	F-A, S-B
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Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not Known

**15. Regulatory information****US Federal Regulations**



**RELIEF (USA)**

**SARA Section 302 Extremely Hazardous Substances Tier II Threshold Planning Quantities**

Not listed

**CERCLA/Superfund, Hazardous Substances/Reportable Quantities (EPA)**

**ETHANEDIOL**

<0.1%

**SARA Extremely Hazardous Substances EPCRA Reportable Quantities**

Not listed

**SARA 313 Emission Reporting**

**2-BUTOXYETHANOL**

1-5%

**CAA Accidental Release Prevention**

Not listed

**FDA - Essential Chemical**

Not listed

**FDA - Precursor Chemical**

Not listed

**OSHA Highly Hazardous Chemicals**

Not listed

**US State Regulations**

**California Proposition 65 Carcinogens and Reproductive Toxins**

Not listed

**California Air Toxics "Hot Spots" (A-I)**

**2-BUTOXYETHANOL**

1-5%

**ETHANEDIOL**

<0.1%

**California Air Toxics "Hot Spots" (A-II)**

Not listed

**California Directors List of Hazardous Substances**

**2-BUTOXYETHANOL**

1-5%

**ETHANEDIOL**

<0.1%

**Massachusetts "Right To Know" List**

**2-BUTOXYETHANOL**

1-5%

**ETHANEDIOL**

<0.1%

**Rhode Island "Right To Know" List**

**2-BUTOXYETHANOL**

1-5%

**ETHANEDIOL**

<0.1%

**RELIEF (USA)****Minnesota "Right To Know" List****2-BUTOXYETHANOL**

1-5%

**ETHANEDIOL**

&lt;0.1%

**New Jersey "Right To Know" List****2-BUTOXYETHANOL**

1-5%

**ETHANEDIOL**

&lt;0.1%

**Pennsylvania "Right To Know" List****2-BUTOXYETHANOL**

1-5%

**ETHANEDIOL**

&lt;0.1%

**Inventories****Canada - DSL/NDSL**

All the ingredients are listed or exempt.

DSL

**US - TSCA**

All the ingredients are listed or exempt.

**US - TSCA 12(b) Export Notification**

Not listed

**16. Other information****Key literature references and sources for data**

Material Safety Data Sheet, Misc. manufacturers.

**Revision comments**

NOTE: Lines within the margin indicate significant changes from the previous revision.

<b>Issued by</b>	J Waterfield
<b>Revision date</b>	3/3/2015
<b>Revision</b>	2.0
<b>Supersedes date</b>	3/1/2014
<b>SDS No.</b>	21154

**Hazard statements in full**

H227 Combustible liquid.  
H302 Harmful if swallowed.  
H312 Harmful in contact with skin.  
H314 Causes severe skin burns and eye damage.  
H315 Causes skin irritation.  
H318 Causes serious eye damage.  
H319 Causes serious eye irritation.  
H332 Harmful if inhaled.

<b>ACA HMIS Health rating.</b>	Serious hazard. (3)
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<b>ACA HMIS Physical hazard rating.</b>	Normally stable. (0)
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**RELIEF (USA)**

**ACA HMIS Personal protection rating.**

C

**ACA HMIS Flammability rating.**

Burns only if pre-heated. (1)

**Disclaimer**

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.