

ACID FUME SCRUBBER SPECIFICATION SHEET

ACID FUME SCRUBBER SPECIFICATION

ProMinent®



Tank Mount Scrubber kit
with Indicating Reagent
PN 7747090



Scrubber with Wall Mount Kit
Order parts **7747090** and **7747091**



Wall Mount Kit
PN 7747091

An acid tank refill of 60 Gallons/week will deplete one unit in about 6 months depending on temperature and other influences. This scrubber is designed for Hydrochloric Acid.



Indicating Reagent
PN 7747102

ACID FUME SCRUBBER SPECIFICATION SHEET

Jaco tubing fitting is
 $\frac{1}{2}$ "OD X $\frac{1}{2}$ " MPT

Nipple is $\frac{1}{2}$ "
Bushing is $\frac{1}{2}$ " x $\frac{3}{4}$ "

Union is $\frac{3}{4}$ "

Nipple is $\frac{3}{4}$ "



10" 1-5/8" FRP Unistrut channel

3" FRP pipe clamp

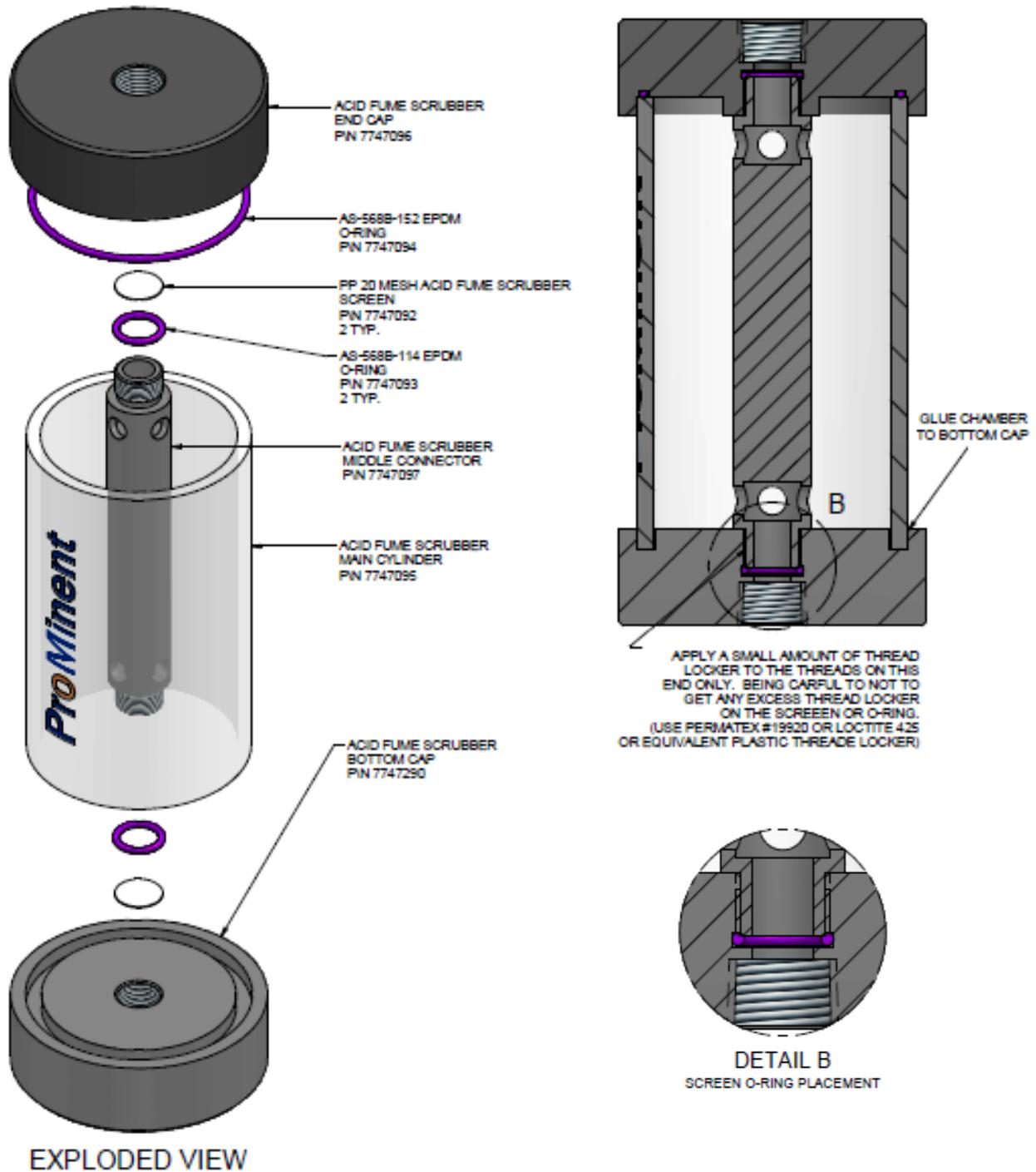
10' $\frac{1}{2}$ "OD PVC tubing

2 Jaco $\frac{1}{2}$ " x $\frac{1}{2}$ " MNPT tubing fittings

$\frac{3}{4}$ " x $\frac{1}{2}$ " PVC bushing



ACID FUME SCRUBBER SPECIFICATION SHEET

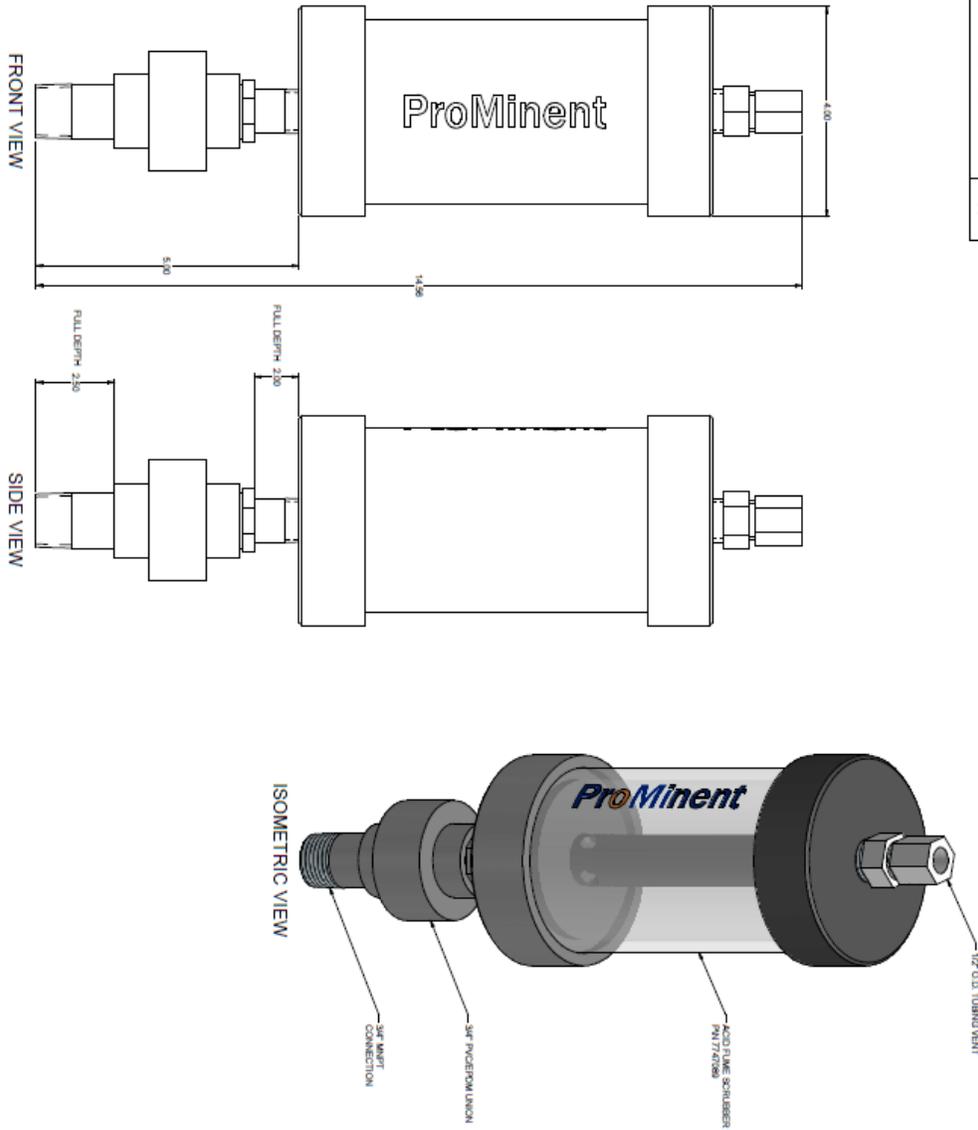


NOTES:

The top and bottom caps are dissimilar. They are not interchangeable.
If you need a bottom cap or a main cylinder, they come as a glued set. Please order both.

ACID FUME SCRUBBER SPECIFICATION SHEET

7747090-400 REV A



- NOTES:
1. ALL BRING AND FITTINGS SHALL BE SCH. 80 PUC SOCKET WELD WITH EPDM SEALS UNLESS OTHERWISE REQUIRED BY COMMENTS.
 2. TO ORDER O-RING REPLACEMENT KIT, ORDER PN 7747088.
 3. TO ORDER ADDITIONAL MEDIA, ORDER PN 7747102.
 4. TO ORDER OPTIONAL WALL MOUNTING KIT, ORDER PN 7747091.
 5. ALL DIMENSIONS ARE IN INCHES AND ARE SHOWN FOR REFERENCE ONLY.

REV	A	12/06/13	REVISED PER SCRUBBER CHANGES	DATE	DESCRIPTION
REV	0	04/10/13	FIRST ISSUE	DATE	DESCRIPTION

Customer: **PROMINENT FLUID CONTROLS INC. (ACID FUME SCRUBBER)**
 JOB No. 7747090 PURCHASE ORDER No. N/A
 TITLE: **DRUM MOUNTED ACID FUME SCRUBBER ASSEMBLY DRAWING**

ENGINEERING SEAL

ProMinent
 THE PROMINENT GROUP OF COMPANIES

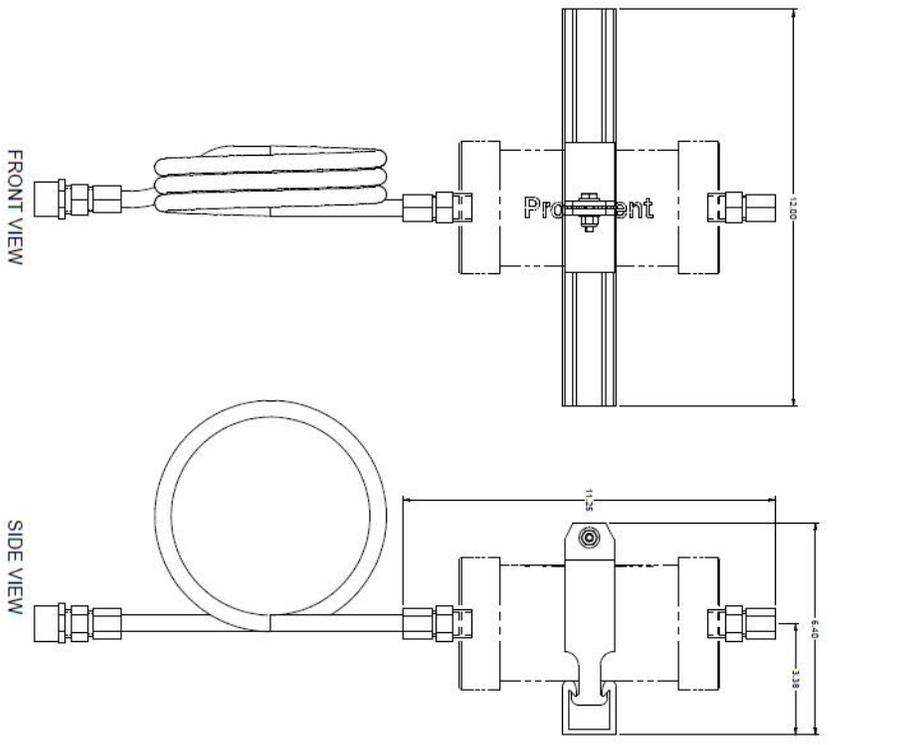
11718 BIRCHMOUNT RD. SUITE 100
 GREENSBORO, NC 27409
 TEL: 336.733.2800 FAX: 336.733.2801
 WWW.PROMINENT.COM

DATE: 04/10/13
 DRAWN: GJS
 CHECKED: GJS

7747090-400 REV A PAGE 1/1

ACID FUME SCRUBBER SPECIFICATION SHEET

7747091-400 REV A



- NOTES:
1. ALL PIPING AND FITTINGS SHALL BE SCH. 80 PVC T-HEADED WITH EPDM SEALS UNLESS OTHERWISE REQUIRED BY COMPONENTS.
 2. ACID FUME SCRUBBER IS SHOWN FOR REFERENCE ONLY.
 3. ALL DIMENSIONS ARE IN INCHES AND ARE SHOWN FOR REFERENCE ONLY.

REV	DATE	DESCRIPTION	BY	APPROVED
A	12/08/13	REVISED PER SCRUBBER CHANGES	GJS	
0	04/10/13	FIRST ISSUE	GJS	

CUSTOMER: PROMINENT FLUID CONTROLS INC.
 (ACID FUME SCRUBBER)
 JOB NO: 7747091
 PURCHASE ORDER NO: N/A
 TITLE: REMOTE MOUNTED ACID FUME SCRUBBER ASSEMBLY DRAWING



PROMINENT FLUID CONTROLS INC.
 485 SOUTH PLATE DRIVE
 DELTAPARK, CANARIO, CANADA
 TEL: 781-888-8888 FAX: 781-888-8888
 WWW.PROMINENTFLUIDCONTROLS.COM

DRAWING NO: 7747091-400
 REV: A
 PAGE: 1/1



Certificate of Analysis

Material	7747102
Material description	Soda lime
Grade	ACS
Lot	17A305216
Expires end of	10/2019
CAS Number	8006-28-8
Molecular formula	HCaNaO2
Molecular mass	96.07
Last Quality Control	01/2017
Date of manufacture	2016/10/11
Made in	USA
Storage	Ambient storage.

Characteristics

Specifications

Measured values

Appearance:	.	.
White to off-white chunks	Passes test	Passes test
Solubility in water (5 % W/V)	Slightly soluble	Slightly soluble
Carbon dioxide absorption capacity	Min. 19.0 %	26.6 %
Fines	Max. 1 %	< 1 %
Loss on drying (200°C)	Max. 7 %	1 %

Signature

We certify that this batch conforms to the specifications listed above.

This document has been produced electronically and is valid without a signature.

Anand Matta, Head of Laboratory - Aurora
VWR Chemicals, LLC, 220 Lena Dr., Aurora, OH 44202, USA

51A2D5-A28458-7882A458

1. PRODUCT AND COMPANY IDENTIFICATION

1.1 Product identifiers

Product name : Soda lime

Product Number : 266434

Brand : Sigma-Aldrich

CAS-No. : 8006-28-8

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Laboratory chemicals, Manufacture of substances

1.3 Details of the supplier of the safety data sheet

Company : Sigma-Aldrich
3050 Spruce Street
SAINT LOUIS MO 63103
USA

Telephone : +1 800-325-5832

Fax : +1 800-325-5052

1.4 Emergency telephone number

Emergency Phone # : +1-703-527-3887 (CHEMTREC)

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Skin corrosion (Category 1A), H314

Serious eye damage (Category 1), H318

For the full text of the H-Statements mentioned in this Section, see Section 16.

2.2 GHS Label elements, including precautionary statements

Pictogram



Signal word : Danger

Hazard statement(s)

H314

Causes severe skin burns and eye damage.

Precautionary statement(s)

P260

Do not breathe dust or mist.

P264

Wash skin thoroughly after handling.

P280

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

P301 + P330 + P331

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P303 + P361 + P353

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

P304 + P340

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

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 or doctor/ physician.
P321 Specific treatment (see supplemental first aid instructions on this label).
P363 Wash contaminated clothing before reuse.
P405 Store locked up.
P501 Dispose of contents/ container to an approved waste disposal plant.

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS - none

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances
CAS-No. : 8006-28-8

Hazardous components

Component	Classification	Concentration
Soda lime	Skin Corr. 1A; Eye Dam. 1; H314	-

For the full text of the H-Statements mentioned in this Section, see Section 16.

4. FIRST AID MEASURES

4.1 Description of first aid measures

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact

Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Consult a physician.

In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. Continue rinsing eyes during transport to hospital.

If swallowed

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

4.3 Indication of any immediate medical attention and special treatment needed

No data available

5. FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2 Special hazards arising from the substance or mixture

Nature of decomposition products not known.

5.3 Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

5.4 Further information

No data available

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

For personal protection see section 8.

6.2 Environmental precautions

Do not let product enter drains.

6.3 Methods and materials for containment and cleaning up

Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

For disposal see section 13.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Avoid formation of dust and aerosols.

Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection.

For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well-ventilated place.

7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Components with workplace control parameters

Contains no substances with occupational exposure limit values.

8.2 Exposure controls

Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Personal protective equipment

Eye/face protection

Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Full contact

Material: Nitrile rubber

Minimum layer thickness: 0.11 mm

Break through time: 480 min

Material tested: Dermatril® (KCL 740 / Aldrich Z677272, Size M)

Splash contact

Material: Nitrile rubber

Minimum layer thickness: 0.11 mm

Break through time: 480 min

Material tested: Dermatril® (KCL 740 / Aldrich Z677272, Size M)

data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de, test method: EN374

If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

Body Protection

Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure

Do not let product enter drains.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

- | | |
|---|---------------------------------|
| a) Appearance | Form: granular
Colour: beige |
| b) Odour | No data available |
| c) Odour Threshold | No data available |
| d) pH | 7.0 - 14.0 |
| e) Melting point/freezing point | No data available |
| f) Initial boiling point and boiling range | No data available |
| g) Flash point | No data available |
| h) Evaporation rate | No data available |
| i) Flammability (solid, gas) | No data available |
| j) Upper/lower flammability or explosive limits | No data available |
| k) Vapour pressure | No data available |
| l) Vapour density | No data available |
| m) Relative density | No data available |
| n) Water solubility | insoluble |
| o) Partition coefficient: n-octanol/water | No data available |
| p) Auto-ignition temperature | No data available |
| q) Decomposition temperature | No data available |
| r) Viscosity | No data available |
| s) Explosive properties | No data available |
| t) Oxidizing properties | No data available |

9.2 Other safety information

No data available

10. STABILITY AND REACTIVITY

- 10.1 Reactivity**
No data available
- 10.2 Chemical stability**
Stable under recommended storage conditions.
- 10.3 Possibility of hazardous reactions**
No data available
- 10.4 Conditions to avoid**
Air sensitive.
- 10.5 Incompatible materials**
Strong acids
- 10.6 Hazardous decomposition products**
Other decomposition products - No data available
In the event of fire: see section 5

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity

No data available

Inhalation: No data available

Dermal: No data available

No data available

Skin corrosion/irritation

No data available

Serious eye damage/eye irritation

No data available

Respiratory or skin sensitisation

No data available

Germ cell mutagenicity

No data available

Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive toxicity

No data available

No data available

Specific target organ toxicity - single exposure

No data available

Specific target organ toxicity - repeated exposure

No data available

Aspiration hazard

No data available

Additional Information

RTECS: Not available

Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin.,
Cough, Shortness of breath, Headache, Nausea

12. ECOLOGICAL INFORMATION

12.1 Toxicity

No data available

12.2 Persistence and degradability

No data available

12.3 Bioaccumulative potential

No data available

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

12.6 Other adverse effects

No data available

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product

Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

Contaminated packaging

Dispose of as unused product.

14. TRANSPORT INFORMATION

DOT (US)

UN number: 1907 Class: 8 Packing group: III

Proper shipping name: Soda lime

Marine pollutant: No

Poison Inhalation Hazard: No

IMDG

UN number: 1907 Class: 8 Packing group: III EMS-No: F-A, S-B

Proper shipping name: SODA LIME

Marine pollutant: No

IATA

UN number: 1907 Class: 8 Packing group: III

Proper shipping name: Soda lime

15. REGULATORY INFORMATION

SARA 302 Components

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SARA 311/312 Hazards

Acute Health Hazard

Massachusetts Right To Know Components

No components are subject to the Massachusetts Right to Know Act.

Pennsylvania Right To Know Components

	CAS-No.	Revision Date
Soda lime	8006-28-8	

New Jersey Right To Know Components

	CAS-No.	Revision Date
Soda lime	8006-28-8	

California Prop. 65 Components

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

16. OTHER INFORMATION**Full text of H-Statements referred to under sections 2 and 3.**

Eye Dam.	Serious eye damage
H314	Causes severe skin burns and eye damage.
H318	Causes serious eye damage.
Skin Corr.	Skin corrosion

HMIS Rating

Health hazard:	3
Chronic Health Hazard:	
Flammability:	0
Physical Hazard	0

NFPA Rating

Health hazard:	3
Fire Hazard:	0
Reactivity Hazard:	0

Further information

Copyright 2014 Sigma-Aldrich Co. LLC. License granted to make unlimited paper copies for internal use only. The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Corporation and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.sigma-aldrich.com and/or the reverse side of invoice or packing slip for additional terms and conditions of sale.

Preparation Information

Sigma-Aldrich Corporation
 Product Safety – Americas Region
 1-800-521-8956

Version: 4.3

Revision Date: 08/21/2014

Print Date: 03/23/2017