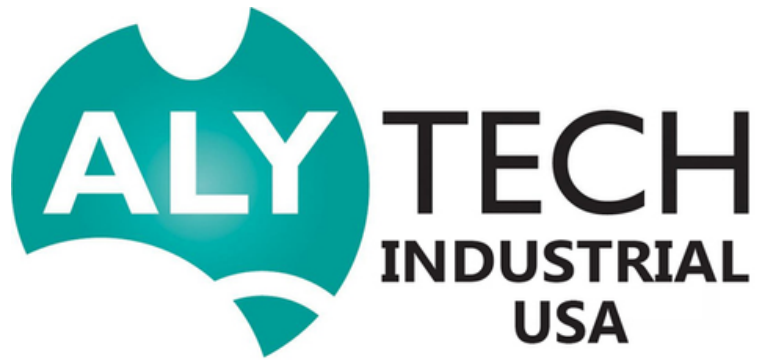




On Site Medical Waste Shredder & Sterilizer



Catalog 2024





»» About us - Alytech

Alytech is a diverse company with a single focus – to provide world-class innovations aimed at renewing and reusing resources. All Alytech systems are under the name [Alymed](#).

Whether it is supplying machines for onsite medical waste disposal of solid and liquid medical waste (eliminating the need for costly transportation of medical waste), our endeavors have produced remarkable results to date.

As the world's resources dwindle, communities and governments seek sensible solutions to growing societal demands. Alytech has the capacity and the ambition to deliver precisely the right products and services to solve these dilemmas. Utilizing the skills of dedicated professionals, the company can mobilize quickly and efficiently to deal with waste issues while providing workable solutions on time and within budget.

The main expertise of Alytech is in the field of processing medical waste management, converting dangerous medical waste to harmless general waste by shredding and chemical sterilizing the waste and reducing the volume of the waste by up to 90%.

Alytech systems have a small footprint and were designed to be friendly to the environment.

The system does not use heat pressure or dust, and there is no contaminated air pollution or other particles that get into the environment.



The sterilizer, which is called “Alymed Steriliser,” is biodegradable, and the sterilized liquid that comes out at the end of the process can go directly into the local drainage system. The process is a cold process that does not need heat or pressure and does not create any hazard to the environment. The system is designed to be as “Green” as possible, and all processes from the bigging to the end of the contaminated waste are isolated from the environment.

Whether your facility is a hospital, surgical center, dialysis center, blood bank, nursing home, veterinary clinic or waste processing facility, an Alymed waste disposal management the system can reduce your medical waste disposal costs by 50 percent over traditional waste transport.

The company, with its technical partners, can offer resolution to any size facility needs. We are working tirelessly to design and manufacture systems that will provide the best solutions to the problems hospitals and laboratories are facing. We’re doing it together and with a cooperation agreement with our machinery partner manufacturer FV Evans & Sons.



»» About us - FV Evans & Sons

Established in 1947, **FV Evans and Sons** has become the CNC experts in Upper Hutt, and is recognized as a Full Service Mechanical Engineering Company.

Over the past 77 years in business, The company has evolved from a major service engineer to the New Zealand Rimutaka Rail Tunnel Project to a highly respected Design, Build Mechanical Engineering Firm.

The Hutt Valley has plenty of engineering history, from pre-war motor assembly to war production and the rise of the large scale CKD Car Assembly. FV Evans and Sons has grown through these times contributing its engineering skills at all levels.

In recent years the company has undertaken design and build projects for Local Authorities, Heavy Industry, Railway Vehicular Refurbishments, and Defence Department all of who are today still happy to use the services of FV Evans and Sons.

Today **FV Evans and Sons** are the makers of Evashred shredders held in high regard globally as a high.-quality manufacturer of industrial shredders and related products, we have been building shredders for over 20 years now and have a wealth of experience at our call.



Medical Waste Shredder & Sterilizer

» ALYMED EV400

On Site General Medical Waste Shredder and Sterilizer
Throughput Volume up to 130KG Per Hour





Medical Waste Shredder & Sterilizer

ALYMED EV400

On Site Medical Waste Shredder and Sterilizer

EV400 PERFORMANCE CHARACTERISTICS:

6Kw Maximum Total Power
17 Rpm Cutter Speed Rotation
12mm Cutter Width
Up To 50 Minutes Shredding Per Hour
10 Minutes Wash and Sterilizer Cycle
PLC Siemens Control System
Recommended In-Feed: Hand Feed



Specifications are subject to change without notice. Contact your nearest distributor/ agent for up-to-date specifications prior to purchase.



ALYMED EV400

On Site Medical Waste Shredder and Sterilizer



STERILIZER TANK PERFORMANCE SPECIFICATIONS:

Alymed Shredder Model	Alymed-EV400
Throughput Volume KG	130KG Per Hour
Throughput Volume Liters	1300 Liters Per Hour
Sterilizer Tank Capacity	400 Liters
Drain Cycle & Evacuation	10 Minutes

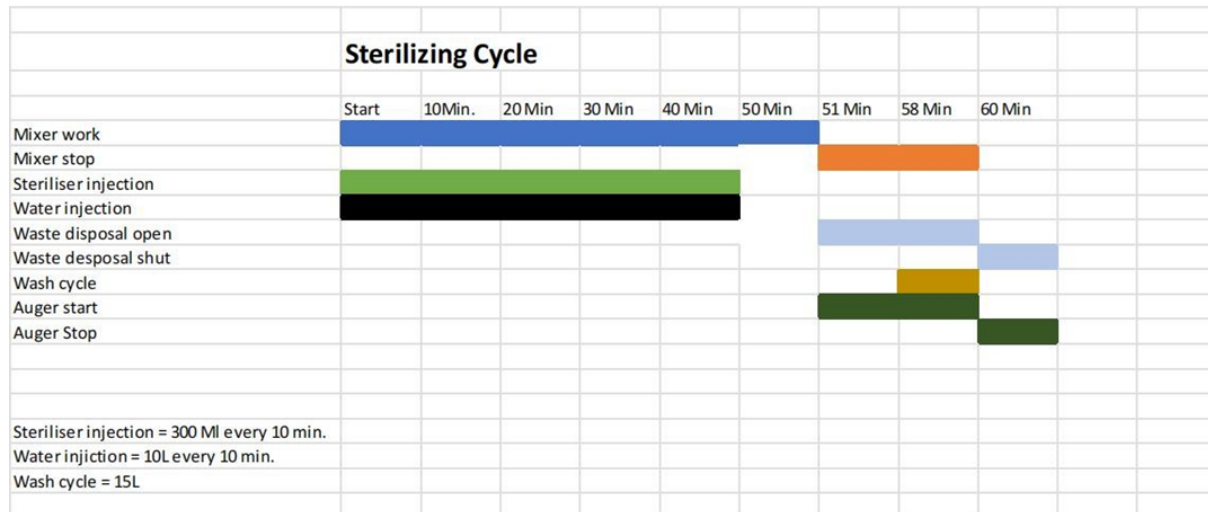
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ALYMED EV400

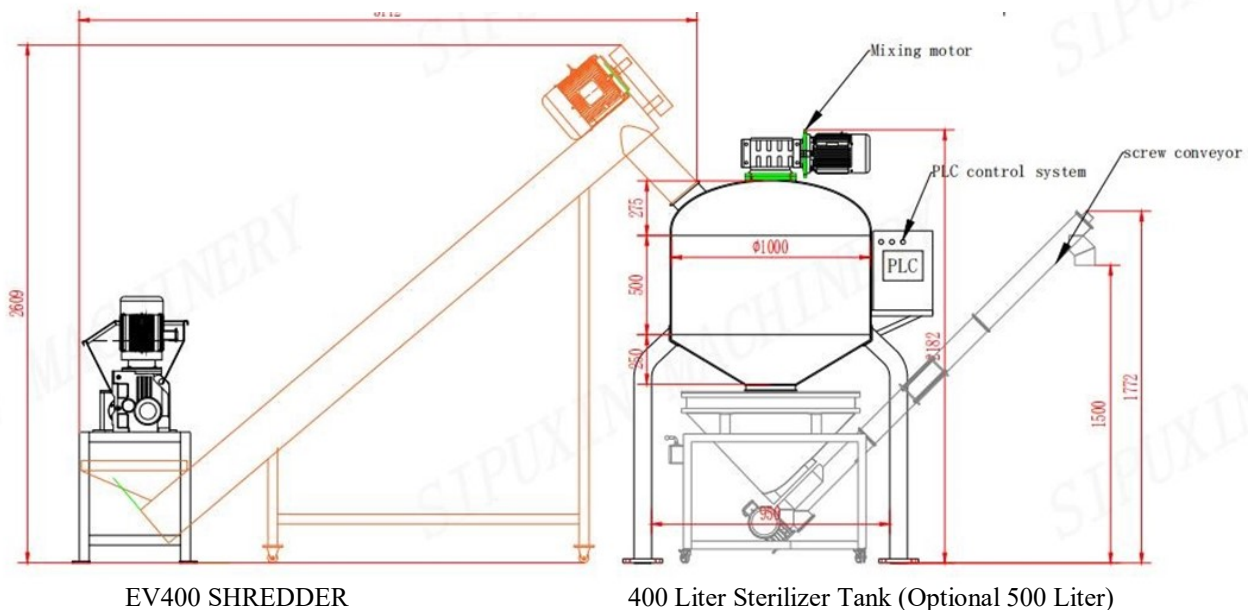
On Site Medical Waste Shredder and Sterilizer

FLOW CHART:



All Shredding And Sterilization Cycles Are Adjustable Through PLC Programs

TECHNICAL SPECIFICATIONS:



Specifications are subject to change without notice. Contact your nearest distributor/ agent for up-to-date specifications prior to purchase.

ALYMED EV400

On Site Medical Waste Shredder and Sterilizer



TECHNICAL SPECIFICATIONS:

	Horizontal Mixing Motor On Top Of Tank Mixing Motor Power 7.5Kw Mixing Motor Speed 0-30RPM Motor Brand SIEMENS
	8 Inch Electric Gate Valve Controlled By PLC Brand SIEMENS
	Mixing Frequency Inverter VSD Brand SIEMENS
	All Electrical Control System Brand Schneider Electric
	Geared Metering Pump Acid And Alkali Resistant Brand SIEMENS

Specifications are subject to change without notice. Contact your nearest distributor/ agent for up-to-date specifications prior to purchase.



ALYMED EV400

On Site Medical Waste Shredder and Sterilizer

SAFETY FEATURES:

- Fully automated shredding and sterilization system with no human contact from point of loading
- Shredder supplied with auto reverse function to clear difficult to shred product
- No air contamination during operation, only at the outlet from the sterilizer tank (Clean Sterilized Air)
- Shredders hopper lid interlocked electrically for safety
- Simple operation with HMI and changeable settings and programs

EV400 TECHNICAL SPECIFICATIONS:

Alymed Shredder Model	Alymed EV400
Motors	3KW + 3kW (6Kw Total)
Input Speed	17Rpm
Blade Size-Diameter/Width	180/15
Shredder Chamber Dimensions	402mm x 300mm
Infeed Hopper Dimensions	700mm x 400mm x 700mm
Machine Dimensions	1200mm x 500mm x 1065mm



Specifications are subject to change without notice. Contact your nearest distributor/ agent for up-to-date specifications prior to purchase.





Medical Waste Shredder & Sterilizer

» ALYMED EV600/400

On Site Medical Waste Shredder and Sterilizer

Throughput Volume up to 260KG Per Hour/400 L sterilizer Tank





Medical Waste Shredder & Sterilizer

ALYMED EV600/400

On Site Medical Waste Shredder and Sterilizer

PERFORMANCE CHARACTERISTICS:

7.5Kw Maximum Power
17 Rpm Cutter Speed Rotation
20mm Cutter Width
Up To 50 Minutes Shredding Per Hour
10 Minutes Wash and Sterilizer Cycle
PLC Siemens Control System
Recommended In-Feed: Hand Feed



Specifications are subject to change without notice. Contact your nearest distributor/ agent for up-to-date specifications prior to purchase.



ALYMED EV600/400

On Site Medical Waste Shredder and Sterilizer



PERFORMANCE SPECIFICATIONS:

Alymed Shredder Model	Alymed-EV600
Throughput Volume KG	260KG Per Hour
Throughput Volume Liters	2600 Liters Per Hour
Bottom Tank Capacity	400 Liters
Drain Cycle & Evacuation	10 Minutes

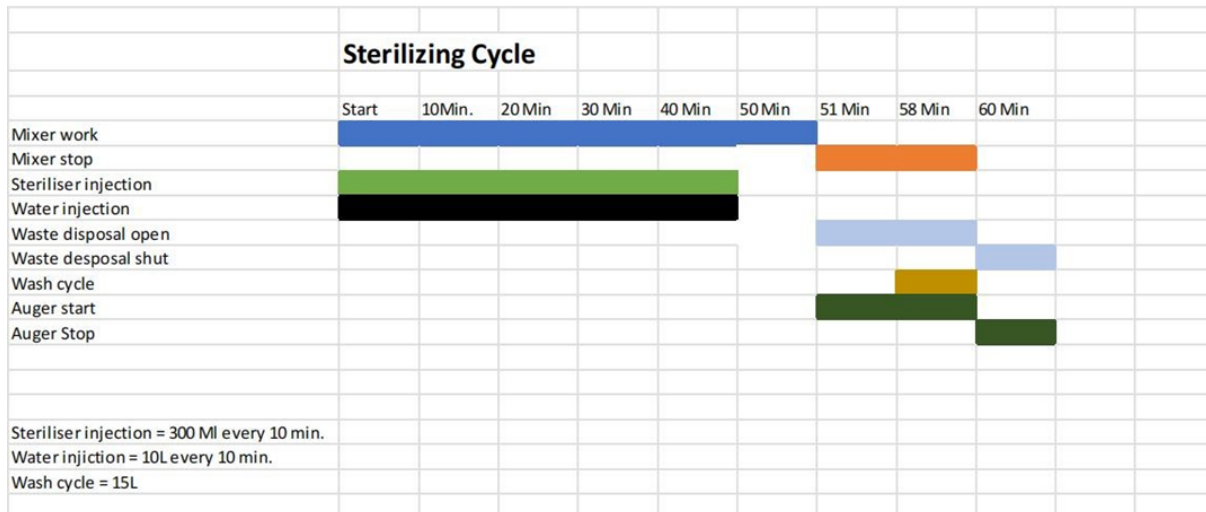
Specifications are subject to change without notice. Contact your nearest distributor/ agent for up-to-date specifications prior to purchase.



ALYMED EV600/400

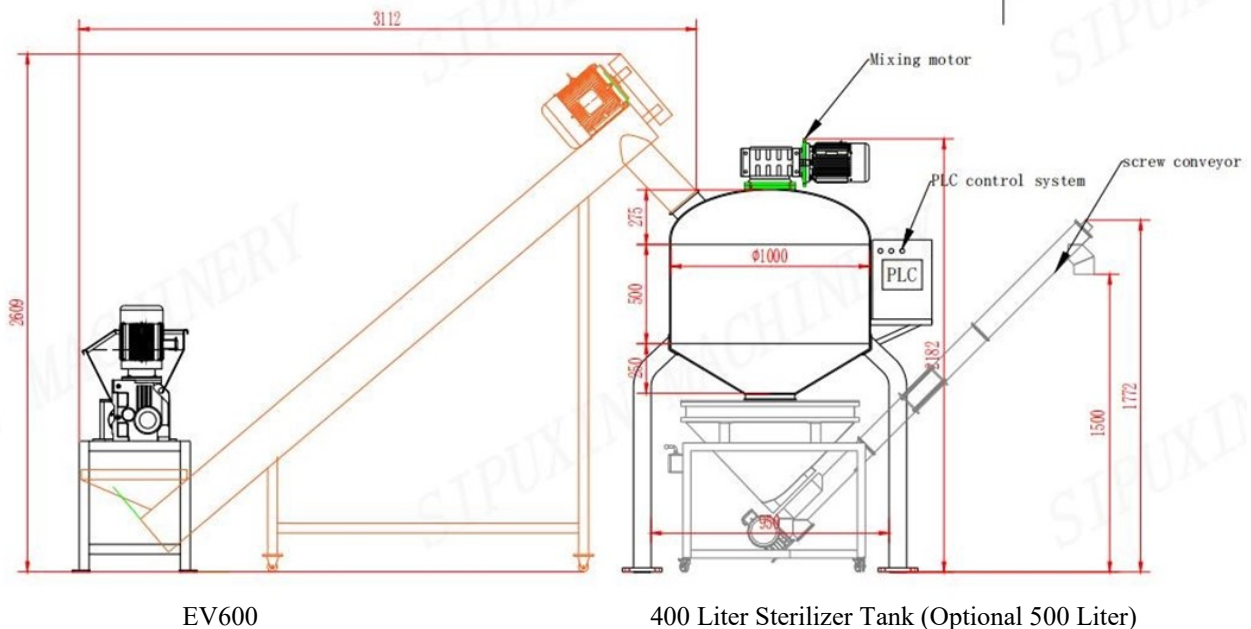
On Site Medical Waste Shredder and Sterilizer

FLOW CHART:



All Shredding And Sterilization Cycles Are Adjustable Through PLC Programs

TECHNICAL SPECIFICATIONS:



Specifications are subject to change without notice. Contact your nearest distributor/ agent for up-to-date specifications prior to purchase.

ALYMED EV600/400

On Site Medical Waste Shredder and Sterilizer



TECHNICAL SPECIFICATIONS:

	Horizontal Mixing Motor On Top Of Tank Mixing Motor Power 7.5Kw Mixing Motor Speed 0-30RPM Motor Brand SIEMENS
	8 Inch Electric Gate Valve Controlled By PLC Brand SIEMENS
	Mixing Frequency Inverter VSD Brand SIEMENS
	All Electrical Control System Brand Schneider Electric
	Geared Metering Pump Acid And Alkali Resistant Brand SIEMENS

Specifications are subject to change without notice. Contact your nearest distributor/ agent for up-to-date specifications prior to purchase.



ALYMED EV600/400

On Site Medical Waste Shredder and Sterilizer

SAFETY FEATURES:

- Fully automated shredding and sterilization system with no human contact from point of loading
- Shredder supplied with auto reverse function to clear difficult to shred product
- No air contamination during operation, only at the outlet from the sterilizer tank (Clean Sterilized Air)
- Shredders hopper lid interlocked electrically for safety
- Simple operation with HMI and changeable settings and programs

EV600 TECHNICAL SPECIFICATIONS:

Alymed Shredder Model	Alymed EV600
Motor	2x 3.75KW (7.5KW Total Power)
Input Speed	17RPM
Blade Size-Diameter/Width	220mm/20mm
Shredder Chamber Dimensions	600mm x 400mm
Infeed Hopper Dimensions	700mm x 500mm x 700mm
Machine Dimensions	1500mm x 1230mm x 1750mm



Specifications are subject to change without notice. Contact your nearest distributor/ agent for up-to-date specifications prior to purchase.





Medical Waste Shredder & Sterilizer

» ALYMED EV600/500

On Site Medical Waste Shredder and Sterilizer

Throughput Volume up to 320KG Per Hour/500 L sterilizer Tank





Medical Waste Shredder & Sterilizer

ALYMED EV600/500

On Site Medical Waste Shredder and Sterilizer

PERFORMANCE CHARACTERISTICS:

7.5Kw Maximum Power

17 Rpm Cutter Speed Rotation

20mm Cutter Width

Up To 50 Minutes Shredding Per Hour

10 Minutes Wash and Sterilizer Cycle

PLC Siemens Control System

Recommended In-Feed: Hand Feed



Specifications are subject to change without notice. Contact your nearest distributor/ agent for up-to-date specifications prior to purchase.



ALYMED EV600/500

On Site Medical Waste Shredder and Sterilizer



PERFORMANCE SPECIFICATIONS:

Alymed Shredder Model	Alymed-EV600
Throughput Volume KG	320KG Per Hour
Throughput Volume Liters	3200 Liters Per Hour
Bottom Tank Capacity	500 Liters
Drain Cycle & Evacuation	10 Minutes

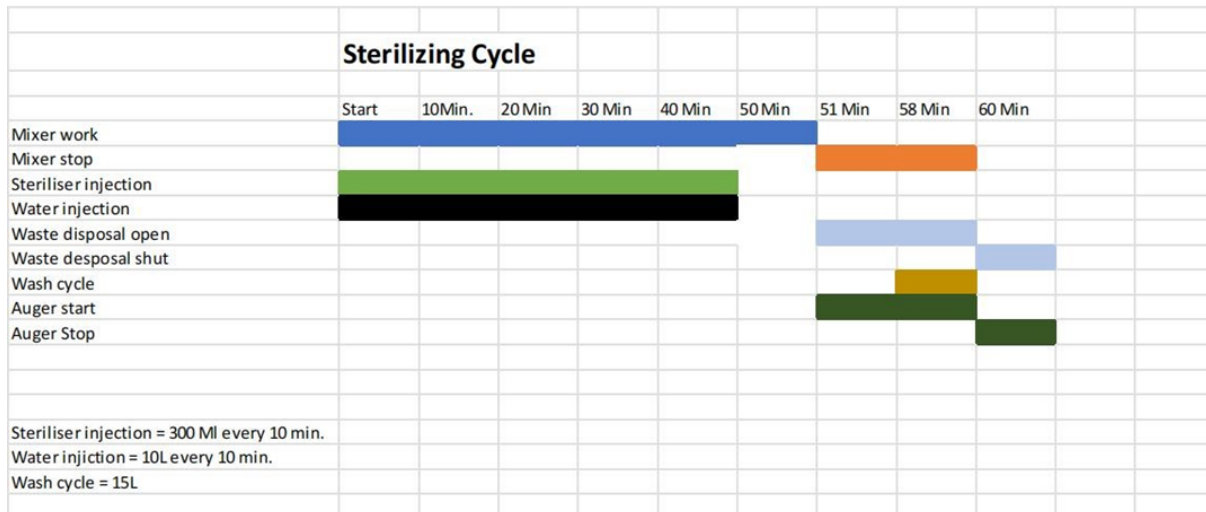
Specifications are subject to change without notice. Contact your nearest distributor/ agent for up-to-date specifications prior to purchase.



ALYMED EV600/500

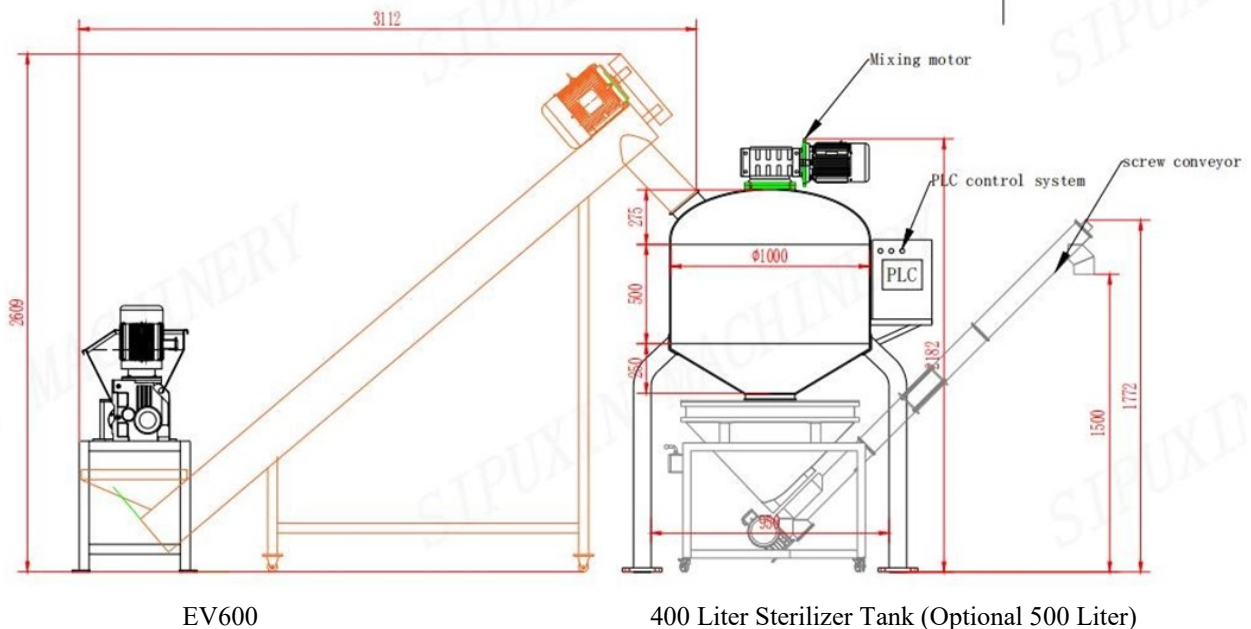
On Site Medical Waste Shredder and Sterilizer

FLOW CHART:



All Shredding And Sterilization Cycles Are Adjustable Through PLC Programs

TECHNICAL SPECIFICATIONS:



Specifications are subject to change without notice. Contact your nearest distributor/ agent for up-to-date specifications prior to purchase.

ALYMED EV600/500

On Site Medical Waste Shredder and Sterilizer



TECHNICAL SPECIFICATIONS:

	Horizontal Mixing Motor On Top Of Tank Mixing Motor Power 7.5Kw Mixing Motor Speed 0-30RPM Motor Brand SIEMENS
	8 Inch Electric Gate Valve Controlled By PLC Brand SIEMENS
	Mixing Frequency Inverter VSD Brand SIEMENS
	All Electrical Control System Brand Schneider Electric
	Geared Metering Pump Acid And Alkali Resistant Brand SIEMENS

Specifications are subject to change without notice. Contact your nearest distributor/ agent for up-to-date specifications prior to purchase.



ALYMED EV600/500

On Site Medical Waste Shredder and Sterilizer

SAFETY FEATURES:

- Fully automated shredding and sterilization system with no human contact from point of loading
- Shredder supplied with auto reverse function to clear difficult to shred product
- No air contamination during operation, only at the outlet from the sterilizer tank (Clean Sterilized Air)
- Shredders hopper lid interlocked electrically for safety
- Simple operation with HMI and changeable settings and programs

EV600 TECHNICAL SPECIFICATIONS:

Alymed Shredder Model	Alymed EV600
Motor	2x 3.75KW (7.5KW Total Power)
Input Speed	17RPM
Blade Size-Diameter/Width	220mm/20mm
Shredder Chamber Dimensions	600mm x 400mm
Infeed Hopper Dimensions	700mm x 500mm x 700mm
Machine Dimensions	1500mm x 1230mm x 1750mm



Specifications are subject to change without notice. Contact your nearest distributor/ agent for up-to-date specifications prior to purchase.





Medical Waste Shredder & Sterilizer

» ALYMED MS-9900

On Site Medical SHARP Shredder and Sterilizer

Throughput Volume up to 400 KG Per Hour/300 L sterilizer Tank





Medical Sharps Shredder & Sterilizer



Alymed MS9900



On Site Medical Sharps Shredder and Sterilizer

PERFORMANCE CHARACTERISTICS:

- 15Kw/20Hp Maximum Power
- 600mm x 330mm Cutting Chamber Opening
- Rated to Shred Up To 300KG Per Hour
- Recommended In-Feed: In-Feed Conveyor or Hand Feed
- Cyclonic Product Transportation and Wash System
- 300 Liter Catch Tank for Sterilization with Drain
- Out-Feed: Direct to Waste Bin
- Electronic Controls

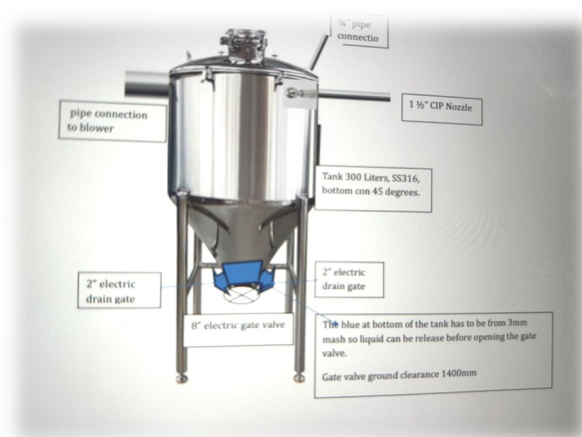


Specifications are subject to change without notice. Contact your nearest distributor/ agent for up-to-date specifications prior to purchase.



MS9900

TECHNICAL SPECIFICATIONS:



PHYSICAL DIMENSIONS:

Total Height	1670mm
Total Length:	1290mm
Total Width:	1130mm
Mesh Screen Hole Size	8mm
Shredder Chamber Opening:	600mm x 330mm

SHREDDER NAME:	Alymed-MS9900 Medical Sharps Shredder & Sterilizer
Number of Motors	1x 15.0Kw (20H/P) 3 Phase 415 Volts (Shredder) 1x 3.0Kw (4hp) Blower Motor 3 Phase (Cyclonic Blower)
Number of Gearboxes Type of Gearboxes	Belt Driven
Cutter Width Critical Shaft Length	Rotary Blades 6x, Fixed 2x 600mm
Cutter Chamber Opening Total Height Floor Footprint Dimensions Weight Without Sterilizer Tank Capacity/Throughput Rate Per Hour	600mm x 330mm 1670mm 1300mm x 1150mm 950KG Up to 300KG Max (With 8mm Screen)



Specifications are subject to change without notice. Contact your nearest distributor/ agent for up-to-date specifications prior to purchase.





Medical Waste Shredder & Sterilizer

» ALYMED TL-40-99

On Site for all Medical Waste , Shredders and Sterilizer for General Medical Waste and Sharp on Integrated tank





ALL Medical Waste Shredder & Sterilzer

Alymed TL40-99 ALL Medical Shredder With Sterilization Tank

APPLICATION:
To Process All Medical Waste Including Sharps

MS9900 Sharps Shredder

15Kw/20Hp Maximum Power
600mm x 330mm Cutting Chamber Opening
Rated to Shred Up To 300KG Per Hour
Cyclonic Product Transportation
Out-Feed: Direct to Sterilizer Tank
recommended Infeed: Hand Feed
Electronic Controls

TL400 Medical Shredder

6Kw Maximum Total Power
17 Rpm Cutter Speed Rotation
12mm Cutter Width
Up To 50 Minutes Shredding Per Hour
10 Minutes Wash and Sterilizer Cycle
PLC Siemens Control System
Recommended In-Feed: Hand Feed
Electronic Controls



Specifications are subject to change without notice. Contact your nearest distributor/ agent for up-to-date specifications prior to purchase.



Alymed TL40-99 All Medical Shredder With Sterilization Tank

MIXING TANK TECHNICAL SPECIFICATIONS:



400L Mixing Tank (option 500L) & Mixing Motor With PLC Control System

- 1) Tank capacity 400 Liters (Option 500Liters)
- 2) Mixer motor 3 phase 480V 60HZ from Siemens
- 3) PLC+HMI control, including programming
- 4) Sealing lid on top
- 5) Metering pump & pipe connection
- 6) 38mm CIP Nozzle for water filling and wash
- 7) One way mixing paddle inside the tank
- 8) 203mm electric gate valve from Siemens
- 9) 25mm Pneumatic valve



Specifications are subject to change without notice. Contact your nearest distributor/ agent for up-to-date specifications prior to purchase.





Medical Waste Shredder & Sterilizer

» ALYMED TL-60-99

On Site for all Medical Waste, Shredders and Sterilizer for General Medical Waste and Sharp on Integrated tank





Alymed TL60-99

ALL Medical Shredder With Sterilization Tank

APPLICATION:
 To Process All Medical Waste Including Sharps

MS9900 Sharps Shredder

15Kw/20Hp Maximum Power
 600mm x 330mm Cutting Chamber Opening
 Rated to Shred Up To 300KG Per Hour
 Cyclonic Product Transportation and Wash
 & Drain, Out-Feed: Direct to Sterilizer Tank
 recommended Infeed: Hand Feed
 Electronic Controls

TL600 Medical Shredder

7.5Kw Maximum Power
 17 Rpm Cutter Speed Rotation
 20mm Cutter Width
 Up To 50 Minutes Shredding Per Hour
 10 Minutes Wash and Sterilizer Cycle
 PLC Siemens Control System
 Recommended In-Feed: Hand Feed
 Electronic Controls



Specifications are subject to change without notice. Contact your nearest distributor/ agent for up-to-date specifications prior to purchase.

Alymed TL60-99 All Medical Shredder & Sterilization Tank

MIXING TANK TECHNICAL SPECIFICATIONS



500L Mixing Tank & Mixing Motor With PLC Control System

- 1) Tank capacity 500 Liters
- 2) Mixer motor 3 phase 480V 60HZ from Siemens
- 3) PLC+HMI control, including programming
- 4) Sealing lid on top
- 5) Metering pump & pipe connection
- 6) 38mm CIP Nozzle for water filling and wash
- 7) One way mixing paddle inside the tank
- 8) 203mm electric gate valve from Siemens
- 9) 25mm Pneumatic valve
- 10) Output up to 300Kg/Hour



Specifications are subject to change without notice. Contact your nearest distributor/ agent for up-to-date specifications prior to purchase.

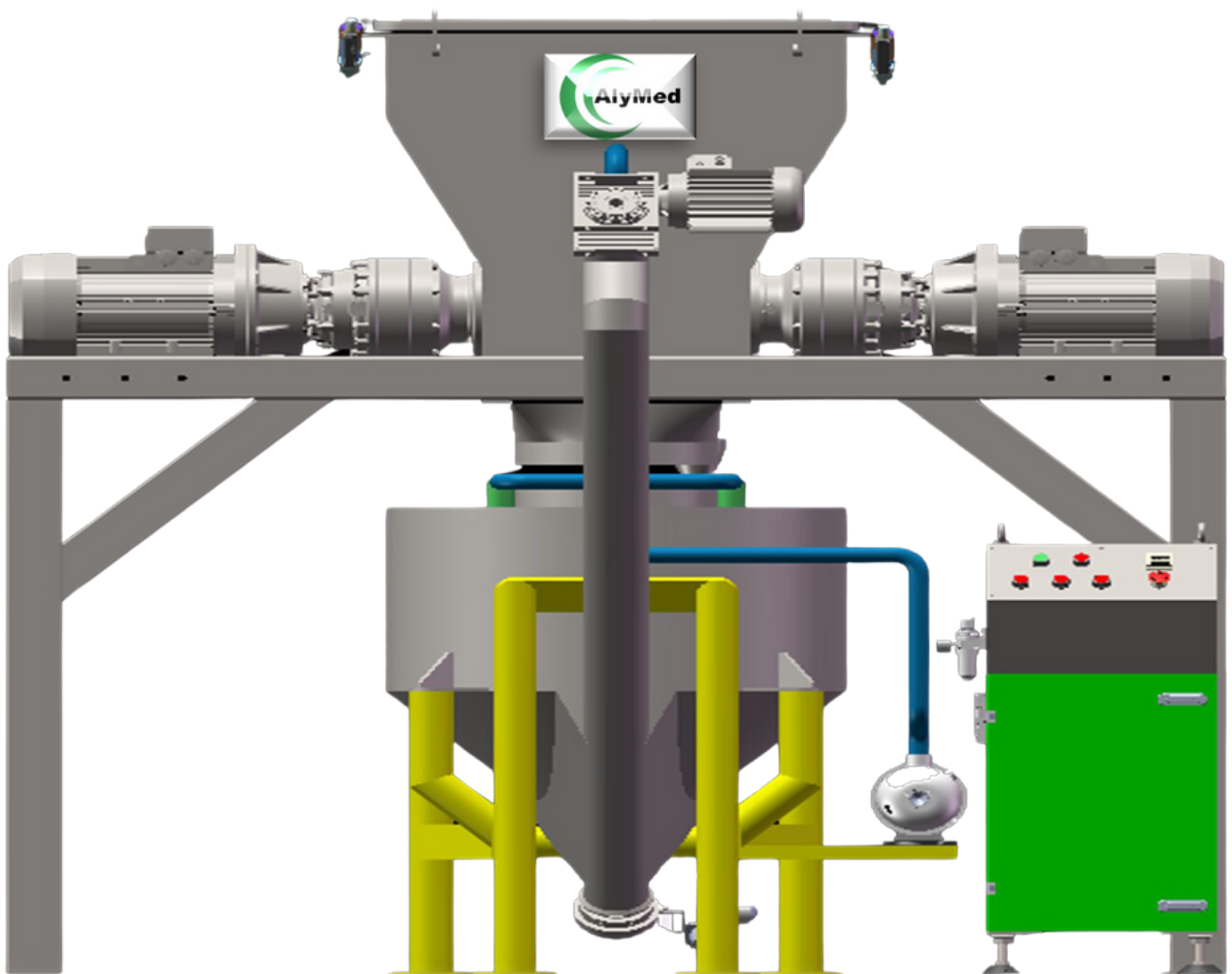




Medical Waste Shredder & Sterilizer

» ALYMED 700-150

On Site General Medical Waste Shredder and Sterilizer with Built-in tank. Throughput Volume up to 120KG Per Hour





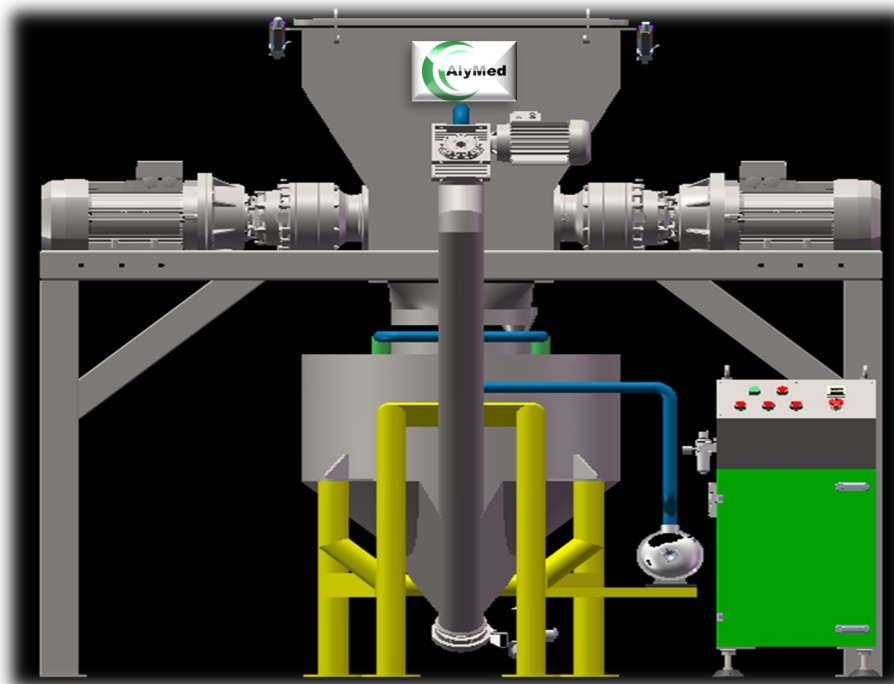
Medical Waste Shredder & Sterilizer

Alymed 700-150

On Site Medical Waste Shredder and Sterilizer

PERFORMANCE CHARACTERISTICS:

11Kw/15Hp Maximum Power
21 Rpm Cutter Speed Rotation
12mm Cutter Width
315mm x 300mm Cutting Chamber Opening
10.2 m/min Cutting Speed
Rated To Shred Up To 120KG of Product Per Hour
72 DbA @ 1 Meter (No Load)
Recommended In-Feed: Hand Feed
Out-Feed: Conveyor to Waste Bin
Electronic Controls

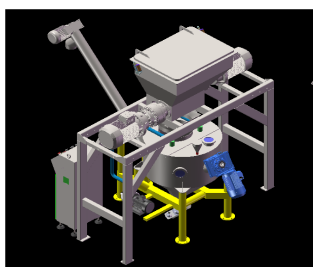
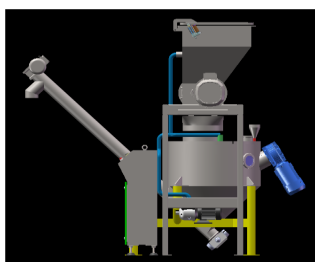
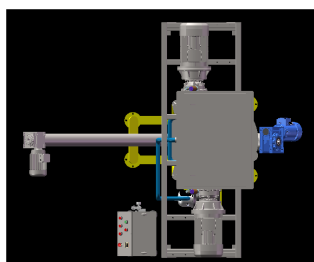


Specifications are subject to change without notice. Contact your nearest distributor/ agent for up-to-date specifications prior to purchase.



Alymed 700-150

TECHNICAL SPECIFICATIONS:



PHYSICAL DIMENSIONS:

Total Height	2200mm
Total Length:	2110mm
Total Width:	2450mm
Ground to Hopper Lip Height	1850mm
Hopper Opening:	700mm x 700mm
Shredder Chamber Opening:	315mm x 300mm

SHREDDER NAME:	Alymed 700-150
Number of Motors	2x 5.5 Kw (7.5 H/P) 3 Phase 415 Volts
Number of Gearboxes	2
Type of Gearboxes	Planetary Reduction
Cutter Width	12mm
Number of Hooks Per Cutter	5
Distance Between Shafts	125mm
Critical Shaft Length	315mm
Cutter Chamber Opening	315mm x 300mm
Cutting Chamber Height	190mm
Hopper Height	700mm
Total Height	2010mm
Floor Footprint Dimensions	2110mm x 2450mm
Weight	1200KG
Capacity/Throughput Rate	Up To 120KG Per Hour
1x Cycle is 4 Cuts of 150 Liters of Medical Waste	With 1x Evacuation
1x Cycle Equals 600 Liters of Medical Waste	Which Equals around 60KG/Hour
1x Cycle Time	Takes 30 Minutes To Process
Total Processing Capacity Each Hour	Approximately 60KG
Water Consumption Per Hour	Approximately 70 Liters
Chemical For Each Cycle (Alymed sterilizer only)	Minimum 1.1 liters/Cycle

Specifications are subject to change without notice. Contact your nearest distributor/ agent for up-to-date specifications prior to purchase.





Medical Waste Shredder & Sterilizer

» ALYMED 700-120

On Site General Medical Waste Shredder and Sterilizer with Built-in tank. Throughput Volume up to 120KG Per Hour





ALYMED 700-120

On Site Medical Waste Shredder and Sterilizer

PERFORMANCE CHARACTERISTICS:

4Kw/5.5Hp Maximum Power
72 RPM Cutting Speed Rotation Cutter
Shaft Critical Length 700mm
Hopper Opening size 700mm x 500mm
Method of Loading: Hand Feed
Product Discharge Method: Auger Conveyor
Cycle Time 20 Minutes 3 Cycles Per/Hour
Shred and Sterilize Up to 150 Liters Per Cycle
Dimensions: L: 2530 mm x H: 1720 mm x W: 760 mm
Omron PLC & HMI

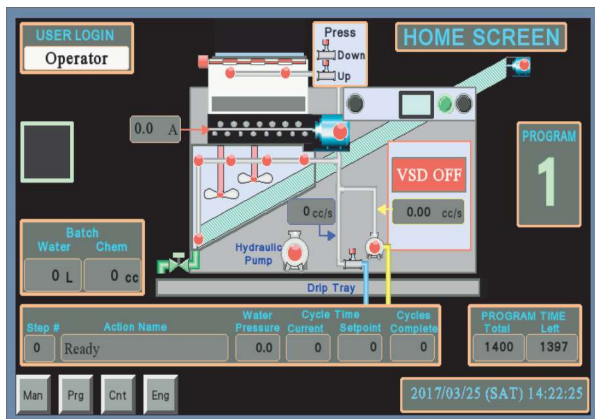


This is a product of Alytech Pty Ltd manufactured by Evashred .

The Alymed is manufacture to Australian and New Zealand Standard Industrial Classification (ANZSIC)

Medical Waste Shredder and Sterilizer

ALYMED 700-120 TECHNICAL SPECIFICATIONS:



Control:

PLC	Omron
HMI	Omron
Real time view	Home Page
Total Reports	All pages
Remote Reports Access	Via Internet
Remote Technical Access	Via Internet

SHREDDER NAME:	Alymed 700-120 Medical Waste Shredder
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Number of Motors	1x 4KW (5.5 H/P) 3 Phase Power
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Number of Reduction Units	1x Planetary Reduction Unit
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Cutter Shaft Length	700mm
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Number of Cutters	54
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Shaft Diameter	220mm
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Cutter Shaft Rotation Speed in RPM	72 RPM (adjustable on HMI)
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Cutting Chamber Opening	700mm x 500mm
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Hopper Height	1720mm
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Loading Height	1300mm
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Total Height	1720mm
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Dimensions (L x H x W)	2530mm x 1720 mm x 760mm
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Weight	800KG
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Capacity/Throughput Rate in Liters/Hour	450 Liters Per Hour
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Water Consumption in Liters Per Cycle	40 liters Per Cycle
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Sterilizer Consumption Per Cycle in Milliliters	300mls-400ml Per Cycle (Dependent on Waste)
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Electricity Consumption Per Cycle	0.35 KWH
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The throughput rate is not guaranteed at any given location.

Specifications are subject to change without notice. Contact your nearest distributor/ agent for up-to-date specifications prior to purchase.



Medical Waste Shredder & Sterilizer

» All medical waste
systems and or SHARP,
Build in container





Medical Waste Shredder & Sterilizer

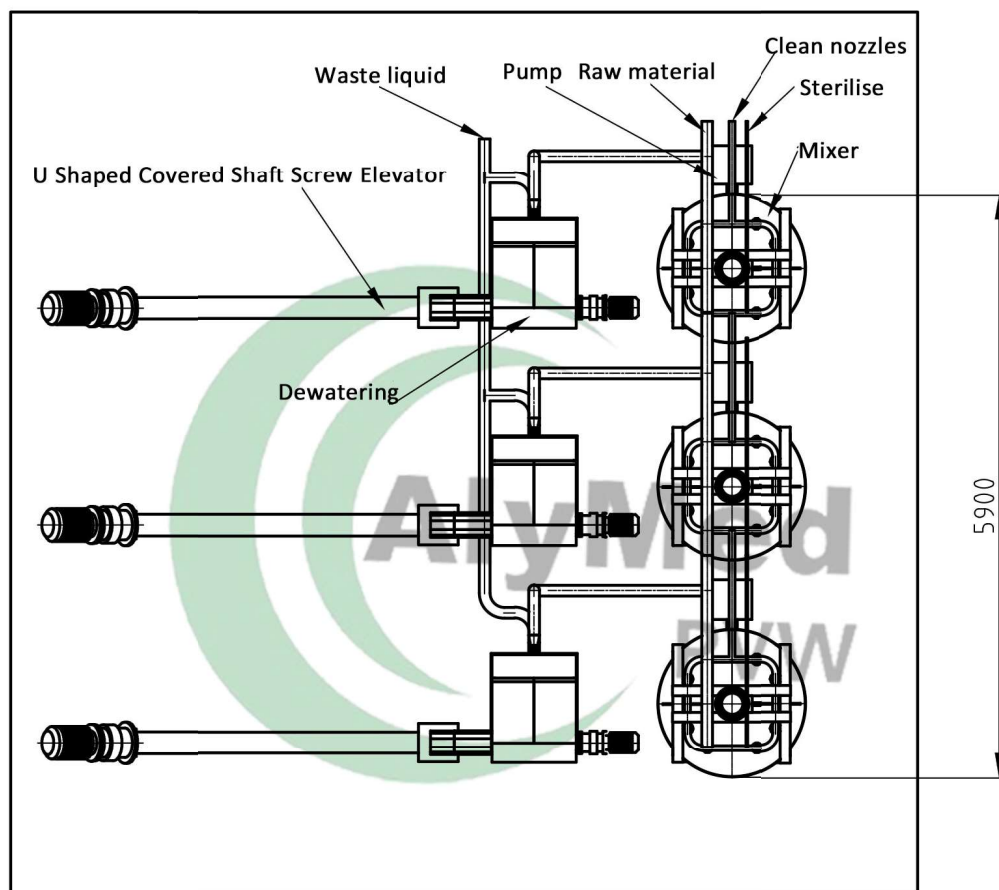
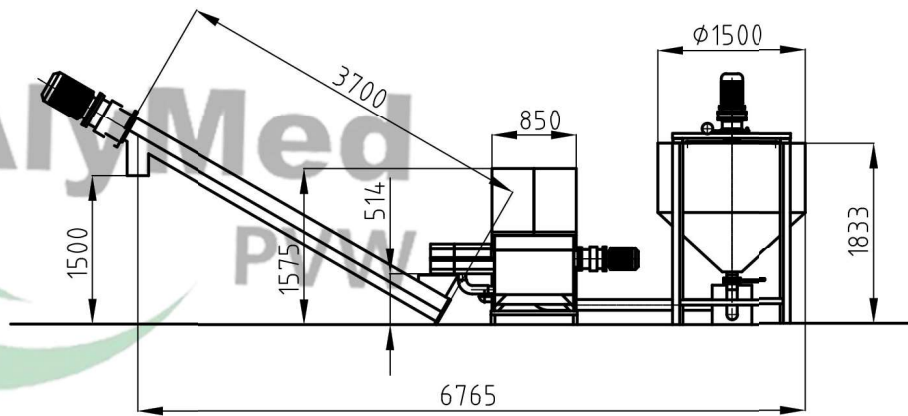
» ALYMED Special Projects

ALYTECH technology enables to establish projects for Shredding and disinfection of medical waste on-site even in a large amount is suitable and approved for the onsite process and can adapted to any a site that uses the collection of medical waste.

Our modular shredders and sanitizing tanks come in several sizes, which allows the planning and implementation of disinfection and shredding of medical material even in amounts of tons per hour, The company can adapt suitable machines and disinfection also for organic materials such as infected eggs, infected meat, etc.

All projects are done according to prior planning and the receipt of the exact data and information from the consumer, so that each machine is personally adapted to each consumer (tailor-made).

All systems are environmentally friendly and do not use heat, pressure or odder and does not release any contaminated air to the environment. A sketch for the project at the request of a laboratory to create polio The vaccine sterilizing project is attached as a sample.



EVASHRED -ALYMED PVR DIAGRAM
Will be designed according to customer requirements



Medical Waste Shredder & Sterilizer

» ALYMED Sterilizer

Peroxyacetic acid, stabilized solution specification lists

BIOGRADABLE CHEMICAL



Alymed Sterilizer

Alytech Pty LTD

Chemwatch: 5237-08

Version No: 3.1.1.1

Safety Data Sheet according to WHS and ADG requirements

Chemwatch Hazard Alert Code: 3

Issue Date: 16/12/2016

Print Date: 16/12/2016

S.GHS.AUS.EN

SECTION 1 IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND OF THE COMPANY / UNDERTAKING

Product Identifier

Product name	Alymed Sterilizer
Synonyms	Green Stericid
Proper shipping name	OXIDISING LIQUID, CORROSIVE, N.O.S. (contains hydrogen peroxide and acetic acid glacial)
Other means of identification	Not Available

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

Relevant identified uses	Waste sterilizer.
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Details of the supplier of the safety data sheet

Registered company name	Alytech
Address	
Telephone	
Fax	
Website	
Email	

Emergency telephone number

Association / Organisation	Not Available
Emergency telephone numbers	
Other emergency telephone numbers	Not Available

SECTION 2 HAZARDS IDENTIFICATION

Classification of the substance or mixture

HAZARDOUS CHEMICAL. DANGEROUS GOODS. According to the WHS Regulations and the ADG Code.

Poisons Schedule	S6
Classification ^[1]	Self Reactive Type A, Oxidizing Liquid Category 2, Acute Toxicity (Oral) Category 4, Acute Toxicity (Inhalation) Category 4, Skin Corrosion/Irritation Category 1A, Serious Eye Damage Category 1
Legend:	1. Classified by Chemwatch; 2. Classification drawn from HSIS ; 3. Classification drawn from EC Directive 1272/2008 - Annex VI

Label elements

GHS label elements	
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SIGNAL WORD **DANGER**

Continued...

Alymed Sterilizer

Hazard statement(s)

H240	Heating may cause an explosion.
H272	May intensify fire; oxidiser.
H302	Harmful if swallowed.
H332	Harmful if inhaled.
H314	Causes severe skin burns and eye damage.
H318	Causes serious eye damage.

Precautionary statement(s) Prevention

P210	Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
P221	Take any precaution to avoid mixing with combustibles/organic material.
P234	Keep only in original container.
P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P271	Use only outdoors or in a well-ventilated area.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P220	Keep/Store away from clothing/organic material/combustible materials.
P270	Do not eat, drink or smoke when using this product.

Precautionary statement(s) Response

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.
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.
P370+P378	In case of fire: Use alcohol resistant foam or fine spray/water fog for extinction.
P370+P380+P375	In case of fire: Evacuate area. Fight fire remotely due to the risk of explosion.
P363	Wash contaminated clothing before reuse.
P301+P312	IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
P304+P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

Precautionary statement(s) Storage

P403+P235	Store in a well-ventilated place. Keep cool.
P405	Store locked up.
P411	Store at temperatures not exceeding 30°C/86°F (see storage requirements on SDS).
P420	Store away from other materials.

Precautionary statement(s) Disposal

P501	Dispose of contents/container in accordance with local regulations.
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SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

Substances

See section below for composition of Mixtures

Mixtures

CAS No	%[weight]	Name
7722-84-1	40-80	<u>hydrogen peroxide</u>
64-19-7	10-40	<u>acetic acid glacial</u>
7664-93-9	1-10	<u>sulfuric acid</u>

SECTION 4 FIRST AID MEASURES

Description of first aid measures

Continued...

Alymed Sterilizer

Eye Contact	If this product comes in contact with the eyes: ▶ Immediately hold eyelids apart and flush the eye continuously with running water. ▶ Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids. ▶ Continue flushing until advised to stop by the Poisons Information Centre or a doctor, or for at least 15 minutes. ▶ Transport to hospital or doctor without delay. ▶ Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.
Skin Contact	If skin contact occurs: ▶ Immediately remove all contaminated clothing, including footwear. ▶ Flush skin and hair with running water (and soap if available). ▶ Seek medical attention in event of irritation.
Inhalation	▶ Inhalation of vapours or aerosols (mists, fumes) may cause lung oedema. ▶ Corrosive substances may cause lung damage (e.g. lung oedema, fluid in the lungs). ▶ As this reaction may be delayed up to 24 hours after exposure, affected individuals need complete rest (preferably in semi-recumbent posture) and must be kept under medical observation even if no symptoms are (yet) manifested. ▶ Before any such manifestation, the administration of a spray containing a dexamethasone derivative or beclomethasone derivative may be considered. This must definitely be left to a doctor or person authorised by him/her. (ICSC13719) ▶ If fumes or combustion products are inhaled remove from contaminated area. ▶ Lay patient down. Keep warm and rested. ▶ Prostheses such as false teeth, which may block airway, should be removed, where possible, prior to initiating first aid procedures. ▶ Apply artificial respiration if not breathing, preferably with a demand valve resuscitator, bag-valve mask device, or pocket mask as trained. Perform CPR if necessary. ▶ Transport to hospital, or doctor, without delay.
Ingestion	▶ If swallowed do NOT induce vomiting. ▶ If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration. ▶ Observe the patient carefully. ▶ Never give liquid to a person showing signs of being sleepy or with reduced awareness; i.e. becoming unconscious. ▶ Give water to rinse out mouth, then provide liquid slowly and as much as casualty can comfortably drink. ▶ Seek medical advice.

Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

Toxic myocarditis may follow ingestion of oxidizing agents such as peroxides.

BASIC TREATMENT

- ▶ Establish a patent airway with suction where necessary.
- ▶ Watch for signs of respiratory insufficiency and assist ventilation as necessary.
- ▶ Administer oxygen by non-rebreather mask at 10 to 15 l/min.
- ▶ Monitor and treat, where necessary, for pulmonary oedema .
- ▶ Monitor and treat, where necessary, for shock.
- ▶ Anticipate seizures .
- ▶ **DO NOT use emetics.** Where ingestion is suspected rinse mouth and give up to 200 ml water (5 ml/kg recommended) for dilution where patient is able to swallow, has a strong gag reflex and does not drool.
- ▶ **DO NOT attempt neutralisation as exothermic reaction may occur.**
- ▶ Skin burns should be covered with dry, sterile bandages, following decontamination.

ADVANCED TREATMENT

- ▶ Consider orotracheal or nasotracheal intubation for airway control in unconscious patient or where respiratory arrest has occurred.
- ▶ Positive-pressure ventilation using a bag-valve mask might be of use.
- ▶ Monitor and treat, where necessary, for arrhythmias.
- ▶ Start an IV D5W TKO. If signs of hypovolaemia are present use lactated Ringers solution. Fluid overload might create complications.
- ▶ Drug therapy should be considered for pulmonary oedema.
- ▶ Hypotension with signs of hypovolaemia requires the cautious administration of fluids. Fluid overload might create complications.
- ▶ Treat seizures with diazepam.
- ▶ Proparacaine hydrochloride should be used to assist eye irrigation.

BRONSTEIN, A.C. and CURRANCE, P.L.

EMERGENCY CARE FOR HAZARDOUS MATERIALS EXPOSURE: 2nd Ed. 1994

Depending on the degree of exposure, periodic medical examination is indicated. The symptoms of lung oedema often do not manifest until a few hours have passed and they are aggravated by physical effort. Rest and medical observation is therefore essential. Immediate administration of an appropriate spray, by a doctor or a person authorised by him/her should be considered.

(ICSC24419/24421

Alymed Sterilizer

SECTION 5 FIREFIGHTING MEASURES

Extinguishing media

FOR SMALL FIRE:

- ▶ USE FLOODING QUANTITIES OF WATER.
- ▶ **DO NOT** use dry chemical, CO₂, foam or halogenated-type extinguishers.

FOR LARGE FIRE

- ▶ Flood fire area with water from a protected position

Special hazards arising from the substrate or mixture

Fire Incompatibility	▶ Avoid any contamination of this material as it is very reactive and any contamination is potentially hazardous
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Advice for firefighters

Fire Fighting	▶ Alert Fire Brigade and tell them location and nature of hazard. ▶ May be violently or explosively reactive. ▶ Wear full body protective clothing with breathing apparatus. ▶ Prevent, by any means available, spillage from entering drains or water courses. ▶ Fight fire from a safe distance, with adequate cover. ▶ Extinguishers should be used only by trained personnel. ▶ Use water delivered as a fine spray to control fire and cool adjacent area.
Fire/Explosion Hazard	▶ Will not burn but increases intensity of fire. ▶ Heating may cause expansion or decomposition leading to violent rupture of containers. ▶ Heat affected containers remain hazardous. ▶ Contact with combustibles such as wood, paper, oil or finely divided metal may produce spontaneous combustion or violent decomposition. ▶ May emit irritating, poisonous or corrosive fumes.
HAZCHEM	2W

SECTION 6 ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

See section 8

Environmental precautions

See section 12

Methods and material for containment and cleaning up

Minor Spills	▶ Clean up all spills immediately. ▶ No smoking, naked lights, ignition sources. ▶ Avoid all contact with any organic matter including fuel, solvents, sawdust, paper or cloth and other incompatible materials, as ignition may result. ▶ Avoid breathing dust or vapours and all contact with skin and eyes. ▶ Control personal contact with the substance, by using protective equipment. ▶ Contain and absorb spill with dry sand, earth, inert material or vermiculite. ▶ DO NOT use sawdust as fire may result.
Major Spills	▶ Clear area of personnel and move upwind. ▶ Alert Fire Brigade and tell them location and nature of hazard. ▶ May be violently or explosively reactive. ▶ Wear full body protective clothing with breathing apparatus. ▶ Prevent, by any means available, spillage from entering drains or water courses. ▶ No smoking, flames or ignition sources. ▶ Increase ventilation.

Personal Protective Equipment advice is contained in Section 8 of the SDS.

SECTION 7 HANDLING AND STORAGE

Precautions for safe handling

Safe handling	▶ Avoid personal contact and inhalation of dust, mist or vapours. ▶ Provide adequate ventilation. ▶ Always wear protective equipment and wash off any spillage from clothing. ▶ Keep material away from light, heat, flammables or combustibles. ▶ Keep cool, dry and away from incompatible materials.
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Continued...

Alymed Sterilizer

	▶ Avoid physical damage to containers. ▶ DO NOT repack or return unused portions to original containers. ▶ DO NOT allow clothing wet with material to stay in contact with skin
Other information	▶ Store in original containers. ▶ Keep containers securely sealed as supplied. ▶ Store in a cool, well ventilated area. ▶ Keep dry. ▶ Store under cover and away from sunlight. ▶ Store away from flammable or combustible materials, debris and waste. Contact may cause fire or violent reaction.

Conditions for safe storage, including any incompatibilities

Suitable container	Store in original containers.
Storage incompatibility	▶ Reacts with mild steel, galvanised steel / zinc producing hydrogen gas which may form an explosive mixture with air. ▶ Avoid strong bases. ▶ Oxidising agents as a class are not necessarily combustible themselves, but can increase the risk and intensity of fire in many other substances. ▶ Avoid storage with reducing agents.

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters

OCCUPATIONAL EXPOSURE LIMITS (OEL)

INGREDIENT DATA

Source	Ingredient	Material name	TWA	STEL	Peak	Notes
Australia Exposure Standards	hydrogen peroxide	Hydrogen peroxide	1.4 mg/m3 / 1 ppm	Not Available	Not Available	Not Available
Australia Exposure Standards	acetic acid glacial	Acetic acid	25 mg/m3 / 10 ppm	37 mg/m3 / 15 ppm	Not Available	Not Available
Australia Exposure Standards	sulfuric acid	Sulphuric acid	1 mg/m3	3 mg/m3	Not Available	Not Available

EMERGENCY LIMITS

Ingredient	Material name	TEEL-1	TEEL-2	TEEL-3
hydrogen peroxide	Hydrogen peroxide	Not Available	Not Available	Not Available
acetic acid glacial	Acetic acid	Not Available	Not Available	Not Available
sulfuric acid	Sulfuric acid	Not Available	Not Available	Not Available

Ingredient	Original IDLH	Revised IDLH
hydrogen peroxide	75 ppm	75 [Unch] ppm
acetic acid glacial	1,000 ppm	50 ppm
sulfuric acid	80 mg/m3	15 mg/m3

Exposure controls

Appropriate engineering controls	Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard. Well-designed engineering controls can be highly effective in protecting workers and will typically be independent of worker interactions to provide this high level of protection. The basic types of engineering controls are: Process controls which involve changing the way a job activity or process is done to reduce the risk. Enclosure and/or isolation of emission source which keeps a selected hazard "physically" away from the worker and ventilation that strategically "adds" and "removes" air in the work environment. Ventilation can remove or dilute an air contaminant if designed properly. The design of a ventilation system must match the particular process and chemical or contaminant in use. Employers may need to use multiple types of controls to prevent employee overexposure.
Personal protection	
Eye and face protection	▶ Safety glasses with unperforated side shields may be used where continuous eye protection is desirable, as in laboratories; spectacles are not sufficient where complete eye protection is needed such as when handling bulk-quantities, where there is a danger of splashing, or if the material may be under pressure.

Alymed Sterilizer

	▶ Chemical goggles whenever there is a danger of the material coming in contact with the eyes; goggles must be properly fitted. ▶ Full face shield (20 cm, 8 in minimum) may be required for supplementary but never for primary protection of eyes; these afford face protection. ▶ Alternatively a gas mask may replace splash goggles and face shields. ▶ Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. A written policy document, describing the wearing of lenses or restrictions on use, should be created for each workplace or task. This should include a review of lens absorption and adsorption for the class of chemicals in use and an account of injury experience.
Skin protection	See Hand protection below
Hands/feet protection	▶ Elbow length PVC gloves ▶ When handling corrosive liquids, wear trousers or overalls outside of boots, to avoid spills entering boots.
Body protection	See Other protection below
Other protection	▶ Overalls. ▶ PVC Apron. ▶ PVC protective suit may be required if exposure severe. ▶ Eyewash unit. ▶ Ensure there is ready access to a safety shower.
Thermal hazards	Not Available

Recommended material(s)

GLOVE SELECTION INDEX

Glove selection is based on a modified presentation of the:

"Forsberg Clothing Performance Index".

The effect(s) of the following substance(s) are taken into account in the

computer-generated selection:

Alymed Sterilizer

Respiratory protection

Type ABE-P Filter of sufficient capacity. (AS/NZS 1716 & 1715, EN 143:2000 & 149:2001, ANSI Z88 or national equivalent)

Material	CPI
NEOPRENE	A
PVC	A
NATURAL RUBBER	B
NATURAL+NEOPRENE	B
NITRILE	B
BUTYL	C
BUTYL/NEOPRENE	C
NAT+NEOPR+NITRILE	C
NEOPRENE/NATURAL	C
NITRILE+PVC	C
PE	C
PE/EVAL/PE	C
SARANEX-23	C
TEFLON	C

* CPI - Chemwatch Performance Index

A: Best Selection

B: Satisfactory; may degrade after 4 hours continuous immersion

C: Poor to Dangerous Choice for other than short term immersion

NOTE: As a series of factors will influence the actual performance of the glove, a final selection must be based on detailed observation. -

* Where the glove is to be used on a short term, casual or infrequent basis, factors such as "feel" or convenience (e.g. disposability), may dictate a choice of gloves which might otherwise be unsuitable following long-term or frequent use. A qualified practitioner should be consulted.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance	Clear, colourless acidic liquid with a sharp pungent odour; miscible with water.
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Continued...

Alymed Sterilizer

Physical state	Liquid	Relative density (Water = 1)	1.123
Odour	Not Available	Partition coefficient n-octanol / water	Not Available
Odour threshold	Not Available	Auto-ignition temperature (°C)	Not Available
pH (as supplied)	<1	Decomposition temperature	55
Melting point / freezing point (°C)	-28	Viscosity (cSt)	Not Available
Initial boiling point and boiling range (°C)	105 initial	Molecular weight (g/mol)	Not Applicable
Flash point (°C)	Not Applicable	Taste	Not Available
Evaporation rate	Not Available	Explosive properties	Not Available
Flammability	Not Applicable	Oxidising properties	Not Available
Upper Explosive Limit (%)	Not Applicable	Surface Tension (dyn/cm or mN/m)	Not Available
Lower Explosive Limit (%)	Not Applicable	Volatile Component (%vol)	Not Available
Vapour pressure (kPa)	3	Gas group	Not Available
Solubility in water (g/L)	Miscible	pH as a solution (1%)	Not Available
Vapour density (Air = 1)	Not Available	VOC g/L	Not Available

SECTION 10 STABILITY AND REACTIVITY

Reactivity	See section 7
Chemical stability	▶ Unstable in the presence of incompatible materials. ▶ Product is considered stable under normal handling conditions. ▶ Prolonged exposure to heat. ▶ Hazardous polymerisation will not occur.
Possibility of hazardous reactions	See section 7
Conditions to avoid	See section 7
Incompatible materials	See section 7
Hazardous decomposition products	See section 5

SECTION 11 TOXICOLOGICAL INFORMATION

Information on toxicological effects

Inhaled	The material can cause respiratory irritation in some persons. The body's response to such irritation can cause further lung damage. Corrosive acids can cause irritation of the respiratory tract, with coughing, choking and mucous membrane damage. There may be dizziness, headache, nausea and weakness.
Ingestion	Accidental ingestion of the material may be harmful; animal experiments indicate that ingestion of less than 150 gram may be fatal or may produce serious damage to the health of the individual. Ingestion of acidic corrosives may produce burns around and in the mouth, the throat and oesophagus. Immediate pain and difficulties in swallowing and speaking may also be evident.
Skin Contact	Skin contact with the material may be harmful; systemic effects may result following absorption. Skin contact with acidic corrosives may result in pain and burns; these may be deep with distinct edges and may heal slowly with the formation of scar tissue. Entry into the blood-stream, through, for example, cuts, abrasions or lesions, may produce systemic injury with harmful effects. Examine the skin prior to the use of the material and ensure that any external damage is suitably protected.
Eye	Direct eye contact with acid corrosives may produce pain, tears, sensitivity to light and burns. Mild burns of the epithelia generally recover rapidly and completely.
Chronic	Repeated or prolonged exposure to acids may result in the erosion of teeth, swelling and/or ulceration of mouth lining. Irritation of airways to lung, with cough, and inflammation of lung tissue often occurs.

Continued...

Alymed Sterilizer

Alymed Sterilizer	TOXICITY	IRRITATION
	Not Available	Not Available
hydrogen peroxide	TOXICITY	IRRITATION
	dermal (rat) LD50: 3000-5480 mg/kg ^[1]	Not Available
	Inhalation (rat) LC50: 2 mg/L/4hr ^[2]	
acetic acid glacial	TOXICITY	IRRITATION
	Dermal (rabbit) LD50: 1060 mg/kg ^[2]	Eye (rabbit): 0.05mg (open)-SEVERE
	Inhalation (mammal) LC50: 11.4 mg/L/4hr ^[2]	Skin (human):50mg/24hr - mild
	Inhalation (mouse) LC50: 5620 ppm/1hr ^[2]	Skin (rabbit):525mg (open)-SEVERE
sulfuric acid	TOXICITY	IRRITATION
	Inhalation (guinea pig) LC50: 0.018 mg/L/8hr ^[2]	Eye (rabbit): 1.38 mg SEVERE
	Inhalation (mouse) LC50: 0.32 mg/L/2hr ^[2]	Eye (rabbit): 5 mg/30sec SEVERE
	Inhalation (rat) LC50: 0.51 mg/L/2hr ^[2]	
Legend:	1. Value obtained from Europe ECHA Registered Substances - Acute toxicity 2.* Value obtained from manufacturer's SDS. Unless otherwise specified data extracted from RTECS - Register of Toxic Effect of chemical Substances	

HYDROGEN PEROXIDE	No significant acute toxicological data identified in literature search. Exposure to hydrogen peroxide via the skin or oral route can produce toxic effects. Animal studies have shown evidence of damage to the kidney, gut, thymus and liver. Stomach and intestinal lesions including benign and malignant cancers have been observed in mice. It may produce genetic and developmental defects but no reproductive toxicity was reported in mice. The substance is classified by IARC as Group 3: NOT classifiable as to its carcinogenicity to humans. Evidence of carcinogenicity may be inadequate or limited in animal testing.
ACETIC ACID GLACIAL	for acid mists, aerosols, vapours Data from assays for genotoxic activity in vitro suggest that eukaryotic cells are susceptible to genetic damage when the pH falls to about 6.5. Cells from the respiratory tract have not been examined in this respect. Mucous secretion may protect the cells of the airways from direct exposure to inhaled acidic mists, just as mucous plays an important role in protecting the gastric epithelium from its auto-secreted hydrochloric acid. In considering whether pH itself induces genotoxic events in vivo in the respiratory system, comparison should be made with the human stomach, in which gastric juice may be at pH 1-2 under fasting or nocturnal conditions, and with the human urinary bladder, in which the pH of urine can range from <5 to > 7 and normally averages 6.2. Furthermore, exposures to low pH in vivo differ from exposures <i>in vitro</i> in that, <i>in vivo</i>, only a portion of the cell surface is subjected to the adverse conditions, so that perturbation of intracellular homeostasis may be maintained more readily than in vitro. The material may produce severe irritation to the eye causing pronounced inflammation. Repeated or prolonged exposure to irritants may produce conjunctivitis. The material may cause severe skin irritation after prolonged or repeated exposure and may produce on contact skin redness, swelling, the production of vesicles, scaling and thickening of the skin. Repeated exposures may produce severe ulceration. Prolonged or repeated exposure to acetic acid may produce irritation and/ or corrosion at the site of contact as well as systemic toxicity. Prolonged inhalation exposure results in muscle imbalance, increase in blood cholinesterase activity, decrease in albumin and decreased growth but no reproductive or foetal toxicity, according to animal testing.
SULFURIC ACID	WARNING: For inhalation exposure <u>ONLY</u>: This substance has been classified by the IARC as Group 1: CARCINOGENIC TO HUMANS Occupational exposures to strong inorganic acid mists of sulfuric acid:
HYDROGEN PEROXIDE & ACETIC ACID GLACIAL & SULFURIC ACID	Asthma-like symptoms may continue for months or even years after exposure to the material ceases. This may be due to a non-allergenic condition known as reactive airways dysfunction syndrome (RADS) which can occur following exposure to high levels of highly irritating compound. Key criteria for the diagnosis of RADS include the absence of preceding respiratory disease, in a non-atopic individual, with abrupt onset of persistent asthma-like symptoms within minutes to hours of a documented exposure to the irritant. A reversible airflow pattern, on spirometry, with the presence of moderate to severe bronchial hyperreactivity on methacholine challenge testing and the lack of minimal lymphocytic inflammation, without eosinophilia, have also been included in the criteria for diagnosis of RADS. RADS (or asthma) following an irritating inhalation is an infrequent disorder with rates related to the concentration of and duration of exposure to the irritating substance. Industrial bronchitis, on the other hand, is a disorder that occurs as result of exposure due to high concentrations of irritating

Alymed Sterilizer

substance (often particulate in nature) and is completely reversible after exposure ceases. The disorder is characterised by dyspnea, cough and mucus production.

Acute Toxicity	✓	Carcinogenicity	⊘
Skin Irritation/Corrosion	✓	Reproductivity	⊘
Serious Eye Damage/Irritation	✓	STOT - Single Exposure	⊘
Respiratory or Skin sensitisation	⊘	STOT - Repeated Exposure	⊘
Mutagenicity	⊘	Aspiration Hazard	⊘

Legend: ✗ – Data available but does not fill the criteria for classification

✓ – Data required to make classification available

⊘ – Data Not Available to make classification

SECTION 12 ECOLOGICAL INFORMATION

Toxicity

Ingredient	Endpoint	Test Duration (hr)	Species	Value	Source
hydrogen peroxide	LC50	96	Fish	0.020mg/L	3
hydrogen peroxide	EC50	48	Crustacea	2.32mg/L	4
hydrogen peroxide	EC50	72	Algae or other aquatic plants	0.71mg/L	4
hydrogen peroxide	EC50	3	Algae or other aquatic plants	0.27mg/L	4
hydrogen peroxide	NOEC	192	Fish	0.028mg/L	4
acetic acid glacial	LC50	96	Fish	31.3-67.6mg/L	2
acetic acid glacial	EC50	48	Crustacea	18.9mg/L	2
acetic acid glacial	EC50	72	Algae or other aquatic plants	29.23mg/L	2
acetic acid glacial	EC50	1	Crustacea	0.0652mg/L	4
acetic acid glacial	NOEC	48	Crustacea	21.5mg/L	2
sulfuric acid	LC50	96	Fish	=8mg/L	1
sulfuric acid	EC50	48	Crustacea	=42.5mg/L	1
sulfuric acid	EC50	240	Algae or other aquatic plants	2.5000mg/L	4
sulfuric acid	NOEC	7200	Fish	0.13mg/L	2

Legend:

Extracted from 1. IUCLID Toxicity Data 2. Europe ECHA Registered Substances - Ecotoxicological Information - Aquatic Toxicity 3. EPIWIN Suite V3.12 - Aquatic Toxicity Data (Estimated) 4. US EPA, Ecotox database - Aquatic Toxicity Data 5. ECETOC Aquatic Hazard Assessment Data 6. NITE (Japan) - Bioconcentration Data 7. METI (Japan) - Bioconcentration Data 8. Vendor Data

|||

DO NOT discharge into sewer or waterways.

LC50-96 Hour - fish [mg/l] : ca.25

48 Hour-EC50 - Daphnia magna [mg/l] : ca.10

IC50 72h Algae [mg/l] : ca.12 [Manufacturer]

Persistence and degradability

Ingredient	Persistence: Water/Soil	Persistence: Air
hydrogen peroxide	LOW	LOW
acetic acid glacial	LOW	LOW

Bioaccumulative potential

Ingredient	Bioaccumulation
hydrogen peroxide	LOW (LogKOW = -1.571)
acetic acid glacial	LOW (LogKOW = -0.17)

Mobility in soil

Ingredient	Mobility
hydrogen peroxide	LOW (KOC = 14.3)

Continued...

acetic acid glacial

HIGH (KOC = 1)

SECTION 13 DISPOSAL CONSIDERATIONS

Waste treatment methods

Product / Packaging disposal	- Recycle wherever possible. - Consult manufacturer for recycling options or consult local or regional waste management authority for disposal if no suitable treatment or disposal facility can be identified. - Treat and neutralise at an approved treatment plant. Treatment should involve: Neutralisation with soda-ash or soda-lime followed by: burial in a land-fill specifically licenced to accept chemical and / or pharmaceutical wastes or Incineration in a licenced apparatus (after admixture with suitable combustible material). - Decontaminate empty containers with 5% aqueous sodium hydroxide or soda ash, followed by water. Observe all label safeguards until containers are cleaned and destroyed.
	For small quantities of oxidising agent:
	- Cautiously acidify a 3% solution to pH 2 with sulfuric acid. - Gradually add a 50% excess of sodium bisulfite solution with stirring. - Add a further 10% sodium bisulfite. - If no further reaction occurs (as indicated by a rise in temperature) cautiously add more acid. - Containers may still present a chemical hazard/ danger when empty. - Return to supplier for reuse/ recycling if possible.
	Otherwise:
	- If container can not be cleaned sufficiently well to ensure that residuals do not remain or if the container cannot be used to store the same product, then puncture containers, to prevent re-use, and bury at an authorised landfill. - Where possible retain label warnings and SDS and observe all notices pertaining to the product.

SECTION 14 TRANSPORT INFORMATION

Labels Required

	 
Marine Pollutant	NO
HAZCHEM	2W

Land transport (ADG)

UN number	3098				
UN proper shipping name	OXIDISING LIQUID, CORROSIVE, N.O.S. (contains hydrogen peroxide and acetic acid glacial)				
Transport hazard class(es)	<table> <tr> <td>Class</td><td>5.1</td></tr> <tr> <td>Subrisk</td><td>8</td></tr> </table>	Class	5.1	Subrisk	8
Class	5.1				
Subrisk	8				
Packing group	II				
Environmental hazard	Not Applicable				
Special precautions for user	<table> <tr> <td>Special provisions</td><td>274</td></tr> <tr> <td>Limited quantity</td><td>1 L</td></tr> </table>	Special provisions	274	Limited quantity	1 L
Special provisions	274				
Limited quantity	1 L				

Air transport (ICAO-IATA / DGR)

UN number	3098						
UN proper shipping name	Oxidizing liquid, corrosive, n.o.s. * (contains hydrogen peroxide and acetic acid glacial)						
Transport hazard class(es)	<table> <tr> <td>ICAO/IATA Class</td><td>5.1</td></tr> <tr> <td>ICAO / IATA Subrisk</td><td>8</td></tr> <tr> <td>ERG Code</td><td>5C</td></tr> </table>	ICAO/IATA Class	5.1	ICAO / IATA Subrisk	8	ERG Code	5C
ICAO/IATA Class	5.1						
ICAO / IATA Subrisk	8						
ERG Code	5C						
Packing group	II						
Environmental hazard	Not Applicable						

Alymed Sterilizer

Special precautions for user	Special provisions	A3
	Cargo Only Packing Instructions	554
	Cargo Only Maximum Qty / Pack	5 L
	Passenger and Cargo Packing Instructions	550
	Passenger and Cargo Maximum Qty / Pack	1 L
	Passenger and Cargo Limited Quantity Packing Instructions	Y540
	Passenger and Cargo Limited Maximum Qty / Pack	0.5 L

Sea transport (IMDG-Code / GGVSee)

UN number	3098
UN proper shipping name	OXIDIZING LIQUID, CORROSIVE, N.O.S. (contains hydrogen peroxide and acetic acid glacial)
Transport hazard class(es)	IMDG Class 5.1
	IMDG Subrisk 8
Packing group	II
Environmental hazard	Not Applicable
Special precautions for user	EMS Number F-A, S-Q
	Special provisions 274
	Limited Quantities 1 L

Transport in bulk according to Annex II of MARPOL and the IBC code

Not Applicable

SECTION 15 REGULATORY INFORMATION

Safety, health and environmental regulations / legislation specific for the substance or mixture

HYDROGEN PEROXIDE(7722-84-1) IS FOUND ON THE FOLLOWING REGULATORY LISTS

Australia Exposure Standards

Australia Hazardous Substances Information System - Consolidated Lists

Australia Inventory of Chemical Substances (AICS)

International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs

International Air Transport Association (IATA) Dangerous Goods Regulations - Prohibited List Passenger and Cargo Aircraft

ACETIC ACID GLACIAL(64-19-7) IS FOUND ON THE FOLLOWING REGULATORY LISTS

Australia Exposure Standards

Australia Hazardous Substances Information System - Consolidated Lists

Australia Inventory of Chemical Substances (AICS)

SULFURIC ACID(7664-93-9) IS FOUND ON THE FOLLOWING REGULATORY LISTS

Australia Exposure Standards

Australia Hazardous Substances Information System - Consolidated Lists

Australia Inventory of Chemical Substances (AICS)

International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs

International Air Transport Association (IATA) Dangerous Goods Regulations - Prohibited List Passenger and Cargo Aircraft

National Inventory	Status
Australia - AICS	Y
Canada - DSL	Y
Canada - NDSL	N (hydrogen peroxide; acetic acid glacial; sulfuric acid)
China - IECSC	Y
Europe - EINEC / ELINCS / NLP	Y
Japan - ENCS	Y
Korea - KECI	Y
New Zealand - NZIoC	Y
Philippines - PICCS	Y
USA - TSCA	Y

Continued...

Alymed Sterilizer

Legend:*Y = All ingredients are on the inventory**N = Not determined or one or more ingredients are not on the inventory and are not exempt from listing(see specific ingredients in brackets)***SECTION 16 OTHER INFORMATION****Other information**

Classification of the preparation and its individual components has drawn on official and authoritative sources as well as independent review by the Chemwatch Classification committee using available literature references.

A list of reference resources used to assist the committee may be found at:

www.chemwatch.net

The SDS is a Hazard Communication tool and should be used to assist in the Risk Assessment. Many factors determine whether the reported Hazards are Risks in the workplace or other settings. Risks may be determined by reference to Exposures Scenarios. Scale of use, frequency of use and current or available engineering controls must be considered.

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TEL (+61 3) 9572 4700.

AlyMed® Sterilizer

INGREDIENTS

hydrogen peroxide
acetic acid glacial
sulfuric acid

CAS No

7722-84-1
64-19-7
7664-93-9

40% - 90%
10% - 40%
1% - 10%



UN No: 3149
DG Class: 5.1
Subsidiary Risk: 8
Packing group: II

PROPERTIES



Liquid.
Mixes with water.
Corrosive.
Increases fire risk.

HEALTH HAZARD INFORMATION



Acute Health Effects:

Causes burns.
Risk of serious damage to eyes.
Harmful by inhalation and if swallowed.

PRECAUTIONS FOR USE



Engineering Controls:

Local Exhaust Ventilation recommended.

Glasses:

Full face- shield.

Gloves:

1.NITRILE

Respirator:

Type AB Filter of sufficient capacity

Storage & Transport:

Keep locked up.
Keep container tightly closed.
Keep container in a well ventilated place.
Restrictions on Storage apply. Refer to Full Report.

Fire/Explosion Hazard:

Attacks metals to liberate hydrogen.

Environment:

This material and its container must be disposed of as hazardous waste.

EMERGENCY

Spills & Disposal:

Absorb with dry agent.
Dilute with water.
Stop leak if safe to do so.
Take off immediately all contaminated clothing.
To clean the floor and all objects contaminated by this material, use water.



FIRST AID

Swallowed:

Give water (if conscious). URGENT MEDICAL ATTENTION.

Eye:

Wash with running water (15 mins). Medical attention.

Skin:

Flood body with water. Remove contaminated clothing.
Wash with water & soap. MEDICAL ATTENTION.

Inhaled:

Fresh air. Rest, keep warm. If breathing shallow, give oxygen. Medical attention.

Advice to Doctor:

Treat symptomatically.

Fire Fighting:

Water spray/fog.



Also known as Green Stercid

DISTRIBUTED BY:

ALYTECH PTY LTD

100 COMAN STREET, ROTHWELL QLD 4002 AUSTRALIA

P: +61 438 259 629 E: alytech1@gmail.com



ALL Medical Waste Shredder & Sterilzer

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- ♦ Completely enclosed system from start to finish
- ♦ Completely safe and simple to operate
- ♦ No internal pressure required or generated
- ♦ No heat generated during processing
- ♦ No air pollution during processing
- ♦ No odour produced during processing
- ♦ No fluid contamination to the environment
- ♦ Product is 100% safe and sterilized after processing
- ♦ Alymed products are supported globally by Alytech



Specifications are subject to change without notice. Contact your nearest distributor/ agent for up-to-date specifications prior to purchase.





Medical Waste Shredder & Sterilizer

» CONTACT US

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