



# Shield Line

## SECTION 1 - PRODUCT

<b>PRODUCT NAME</b>	BZK towelette	<b>DESCRIPTION:</b> Non-woven saturated with 0.133% Benzalkonium Chloride
<b>Recommended Use:</b>	Topical skin antiseptic	

## SECTION 2 - COMPOSITION / INFORMATION ON INGREDIENTS

<b>HAZARDOUS COMPONENTS</b> (Specific Chemical Identity: Common Names)	<b>CAS #'s</b>	<b>Weight %</b>	<b>Weight/pad</b>	<b>Potential Health Effects</b>
Benzalkonium Chloride	8001-54-5	0.133	0.65±0.05mg	Skin contact, Eye contact

## SECTION 3 - HAZARDS IDENTIFICATION (Potential Health Effects)

<b>EYE:</b>	will injure eye tissue if not removed promptly.
<b>SKIN:</b>	<ul style="list-style-type: none"><li>• Low order of toxicity</li><li>• Leading to discomfort and dermatitis .</li></ul>
<b>INHALATION (BREATHING):</b>	Vapour concentrations above recommended exposure levels may be irritating to the eyes and the respiratory tract, may cause headaches and dizziness, could be anesthetic and may have other central nervous system effects
<b>INGESTION (SWALLOWING):</b>	Small amount of liquid aspirated into the respiratory system during ingestion or from vomiting may cause man pneumonia or pulmonary edema.
<b>SIGNS AND SYMPTOMS:</b>	Take by mouth may cause nausea, vomiting, stomach pains, diarrhea, coma or death
<b>CANCER:</b>	N/A
<b>TARGET ORGANS:</b>	N/A
<b>DEVELOPMENTAL:</b>	N/A
<b>OTHER COMMENTS:</b>	N/A
<b>PRE-EXISTING MEDICAL CONDITIONS:</b>	N/A



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## SECTION 4 - FIRST AID MEASURES

<b>Eyes:</b>	Immediately flush eyes with large amount of water for at least 15 minutes. Get prompt medical attention.
<b>SKIN:</b>	<ul style="list-style-type: none"><li>• Flush with large amounts of water ; use available soap .</li><li>• Remove grossly contaminated clothing, including shoes, and launder before reuse.</li></ul>
<b>INHALATION (BREATHING):</b>	<ul style="list-style-type: none"><li>• Using proper respiratory protection, immediately remove the affected victim from exposure, Administrator artificial respiration if breathing is stopped. Keep at rest. Call for prompt medical attention.</li></ul>
<b>INGESTION (SWALLOWING):</b>	<ul style="list-style-type: none"><li>• If swallowed, induce vomiting. Keep at rest. Get prompt medical attention.</li></ul>
<b>NOTE TO PHYSICIANS:</b>	<ul style="list-style-type: none"><li>• Keep victim warm and quiet.</li></ul>
<b>Protection of First-aiders</b>	<ul style="list-style-type: none"><li>• Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.</li></ul>

## SECTION 5 - FIREFIGHTING MEASURES

<b>FLAMMABLE PROPERTIES:</b>	Boiling Point: >100°C/760mmHg(for Liquid) Auto ignition temperature: 399 degree celsius(for paper)
<b>UNUSUAL FIRE &amp; EXPLOSION HAZARDS:</b>	N/A
<b>EXTINGUISHING MEDIA:</b>	Water spray, foam dry chemical or carbon dioxide
<b>FIREFIGHTING INSTRUCTIONS:</b>	<ul style="list-style-type: none"><li>• Use water spray to cool fire exposed surfaces and to protect personnel. Shut off fuel to fire. If a leak or spill has not ignited, use water spray to disperse the vapours and to protect men attempting to stop a leak.</li><li>• Either allow fire to burn under controlled conditions or extinguish with alcohol type foam or dry chemical. Try to cover liquid spills with foam.</li><li>• Spill fires may be extinguished by flooding with large amounts of water.</li></ul>



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## SECTION 6- ACCIDENTAL RELEASE MEASURES

<b>IF SPILLED/RELEASED:</b>	<ul style="list-style-type: none"><li>• Eliminate sources of ignition. Warn occupants of downwind areas of fire and exposure hazard. Prevent liquid from entering sewers, watercourses, or low areas.</li><li>• Dilute contained spill with water.</li></ul>
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## SECTION 7- HANDLING AND STORAGE

<b>HANDLING &amp; STORAGE:</b>	<ul style="list-style-type: none"><li>• Keep container closed. Handle containers with care. Open slowly in order to control possible pressure release. Store in a cool, well-ventilated place away from incompatible materials.</li><li>• Do not handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight.</li><li>• This material is not a static accumulator but use proper bonding and/or grounding procedures.</li><li>• Do not pressurize, cut, heat, or weld containers. Empty product containers may contain product residue.</li><li>• Do not reuse empty containers without commercial cleaning or reconditioning.</li></ul>
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## SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

<b>ENGINEERING CONTROLS:</b>	The use of mechanical dilution ventilation is recommended whenever this product is used in a confined space, is heated above ambient temperatures or otherwise to maintain ambient concentration below the recommended threshold exposure limit. Use explosion-proof ventilation equipment.
<b>RESPIRATORY PROTECTION:</b>	Where concentrations in air may exceed the limits given in this section, it is recommended to use a half face filter mask to protect from overexposure by inhalation. Suitable filter material depends on the amount and type of chemicals being handled in the workplace, but filter material of type "A" or similar may be considered for use.
<b>SKIN PROTECTION:</b>	The use and choice of personal protection equipment is related to the hazard of the product, the workplace, and the way the product is handled. In general, we recommend as a minimum safety precaution that safety glasses with side shields and workclothes protecting arms, legs and body be used. In addition, any person visiting an area where this product is handled at processed should at least wear safety glasses with side-shields.
<b>EYE/FACE PROTECTION:</b>	When handling this product, it is recommended to wear splash resistant goggles.
<b>OTHER PROTECTIVE EQUIPMENT:</b>	No smoking, keep good health habits

## SECTION 9 - PHYSICAL / CHEMICAL PROPERTIES

**Note: Unless otherwise stated, values are determined at 20 degrees Celsius (68 degrees Fahrenheit) and 760 mm Hg (1 atm)**

<b>FLASH POINT:</b>	N/A
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<b>FLAMMABLE/EXPLOSIVE LIMITS (%):</b>	N/A
<b>AUTO IGNITION TEMPERATURE:</b>	399 degree celsius(for paper)
<b>APPEARANCE:</b>	Clear colourless (for liquid)
<b>PHYSICAL STATE:</b>	Liquid
<b>ODOR:</b>	none
<b>pH:</b>	N/A
<b>VAPOR PRESSURE (mm Hg):</b>	N/A
<b>BOILING POINT:</b>	>100°C/760mmHg(for liquid)
<b>FREEZING/MELTING POINT:</b>	-0.5 degree celsius(for liquid)
<b>SOLUBILITY IN WATER:</b>	100 wt%(for Benzalkonium Chloride)
<b>SPECIFIC GRAVITY:</b>	0.98(for Benzalkonium Chloride)
<b>EVAPORATION RATE (nBuAc=1):</b>	N/A

## SECTION 10 - STABILITY & REACTIVITY

<b>CHEMICAL STABILITY:</b>	Stable Incompatible with strong oxidizing agents, moisture. Hygroscopic. (for Benzalkonium Chloride)
<b>CONDITIONS TO AVOID:</b>	N/A
<b>INCOMPATIBLE MATERIALS:</b>	Strong Oxidizing agents, acids, acid anhydride, halogen
<b>HAZARDOUS DECOMPOSITION PRODUCTS:</b>	Combustion produces smoke which with nitric oxide and poisonous chlorine.
<b>HAZARDOUS POLYMERIZATION:</b>	N/A

## SECTION 11 - TOXICOLOGICAL INFORMATION

Oral (small rat) LD50: 150mg/kg (for Benzalkonium Chloride)      eye (rabbit): 0.008 mg/kg (for Benzalkonium Chloride)

## SECTION 12 – ECOLOGICAL INFORMATION

### ENVIRONMENTAL MOBILITY

- This product is water soluble and is expected to remain primarily in water.

### ENVIRONMENTAL DEGRADABILITY

- This product biodegrades rapidly and is “readily” biodegradable according to OECD guidelines.
- This substance is expected to be removed in a waster water treatment facility.

### ECOTOXICITY AND BIOACCUMULATION

- Low acute toxicity to aquatic organisms is expected.



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## SECTION 13 - DISPOSABLE CONSIDERATIONS

The following advice only applies to the product as supplied.  
Combination with other material may well indicate another route or disposal. If in doubt, contact the local Authorities.  
Empty packaging should be taken for recycling, recovery or disposal through a suitably qualified or licenced contractor.  
Care should in any case be taken to ensure compliance with national and local regulations.

This product is NOT suitable for disposal by either landfill or via municipal powers, drains, natural streams or rivers.  
This product is ashless and can be burned directly in appropriate equipment.

## SECTION 14 - REGULATORY INFORMATION

COMPONENT	
GOVERNING DIRECTIVE:	Dangerous Substances Directive 67/548/EC, as modified.