



SAFETY DATA SHEET

SUPERKILL MAX

Sections of this SDS which have their titles shown in italics contain data which is additional to or significantly different from that shown in the previous version.

1. Identification of the preparation and of the company

Preparation name Superkill Max
Use of the preparation Disinfectant

Supplier	AFS Animal Care Ltd. Unit 4C, Stephenson Way Thetford, Norfolk. IP24 3RH	Manufacturer	Kilco (International) Ltd. Broomhouses 2 Industrial Estate, Old Glasgow Road, Lockerbie, Dumfriesshire. DG11 2SD
Phone Number	01842 765634	Phone Number	+44 (0) 1576 205480
Fax Number	01842 820152	Fax Number	+44 (0) 1576 205483
		Emergency Phone Number	+44 (0) 1576 205480 [UK 9am - 5pm only]
		E-mail	sds@kilco.co.uk

2. Hazards identification

Main hazards	Labelling	Toxic, Dangerous for the Environment
	Symbol (s)	T, N
	Risk phrases	<i>R23/25 Toxic by inhalation and if swallowed</i> <i>R34 Causes burns.</i> <i>R40 Limited evidence of a carcinogenic effect</i> <i>R42/43 May cause sensitisation by inhalation and skin contact.</i> <i>R51 Toxic to aquatic organisms</i> <i>R68 Possible risk of irreversible effects</i> <i>R50 Very toxic to aquatic organisms.</i>
Eyes		Vapours cause irritation to the eyes with redness, pain, and blurred vision. Higher concentrations, splashes, or prolonged exposure may cause irreversible eye damage.
Skin		May cause irritation to skin with redness, pain, and possibly burns. Skin absorption may occur with symptoms paralleling those from ingestion. Repeated exposure causes white discoloration, smarting, cracking and scaling.
Ingestion		Can cause severe abdominal pain, violent vomiting, headache, and diarrhoea. Larger doses may produce decreased body temperature, pain in the digestive tract, shallow respiration, weak irregular pulse, unconsciousness and death.
Inhalation		May cause sore throat, coughing, and shortness of breath. Causes irritation and sensitisation of the respiratory tract. Effects are mainly transitory and reversible.

3. Composition / information on ingredients

Chemical Characterisation: Formaldehyde, Glutaraldehyde and Benzalkonium chloride

Component	EINECS No:	CAS No:	% Inclusion	Symbol(s)	R phrases
Formaldehyde	200-001-8	50-00-0	8	T, C	<i>T;R23/24/25. Xn;R68/20/21/22. Carc 3;R40. C;R34. R43</i>
Glutaraldehyde	203-856-5	111-30-8	5	T, N	<i>R23/25, 34, 42/43, 50</i>
Benzalkonium chloride	205-351-5	68424-85-1	6	C, N	<i>R21/22, 34, 50</i>

4. First aid measures

General advice	Remove from exposure
Eyes	Speed is essential. With eye held open, thoroughly rinse with plenty of water for at least 15 minutes. Protect unharmed eye. Continue rinsing process with saline solution.
Skin	Immediately flood the skin with large quantities of water, preferably under a shower. Continue washing for at least 10 minutes. In case of discomfort: Supply with medical care. Remove contaminated clothing immediately as washing proceeds.



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Ingestion Do not induce vomiting. Seek urgent medical advice. Only if patient fully conscious - Rinse mouth with water and then drink copious amounts of water, keep the patient warm and at rest.

Inhalation Take affected persons out into the fresh air. If breathing affected give artificial respiration and seek immediate medical advice.

Notes to physician

5. Fire fighting measures

Suitable Extinguishing media Use water spray, foam, dry powder or carbon dioxide.

Extinguishing media that must not be used for safety reasons

Special exposure hazards

Protective equipment Fire fighters require self-contained breathing apparatus and the necessary personal protective clothing.

Further information: Evacuate personnel to safe areas. Keep out unprotected persons. Keep unauthorised persons away. Water used to extinguish fire should not enter drainage systems, soil or stretches of water. Ensure that there are sufficient retaining facilities for water used to extinguish fire. Contaminated fire-extinguishing water must be disposed of in accordance with the regulations issued by the appropriate local authorities. Fire residues should be disposed of in accordance with the regulations. To cool, spray closed containers with water spray jet. In case of fire, remove the endangered containers and bring to a safe place, if this can be done safely.

6. Accidental release measures

Personal precautions Wear appropriate protective clothing, approved respirator, gloves, goggles etc – see section 8. Evacuate personnel to safe areas. Keep out unprotected persons. Keep unauthorised persons away

Environmental precautions Observe regulations on preventions of water pollution (collect, dam up, cover up) Prevent the material from entering drains or watercourses.

Spillages Large spillages should be collected for disposal. Collect in suitable containers. Keep away from incompatible substances. Clean contaminated surface thoroughly – recommended cleaning agent – water. Dispose of absorbed material in accordance with the regulations – see Section 13.

Additional Advice Make safe or remove all sources of ignition. Isolate defective containers immediately. Stop leak, if possible and safe to do so. Never return spilled product into its original containers for re-use

7. Handling & storage

Handling Wear suitable protective clothing. Avoid contact with skin, eyes and clothing. Do not inhale vapour, aerosols, and sprays. When using, avoid spray mists. Operate in a well ventilated place. For personal protection see Section 8. Handle in accordance with good industrial hygiene and safety practice. Immediately change moistened or saturated work clothes. Immediately rinse contaminated or saturated clothing with water. Never return spilled product into its original containers for re-use. Avoid impurities. Transport and store container in upright position only. Do not empty container by means of pressure.

Storage Keep away from incompatible substances. Keep only in the original container. Keep container closed and in a clean, cool, lockable and well ventilated place away from heat, flammable materials and intense light. Avoid residues of the product on the containers. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

8. Exposure controls / personal protection

Occupational Exposure Standards	Long Term	Short Term
Formaldehyde	2.5 mg/m ³	2.5 mg/m ³
Glutaraldehyde	0.2 mg/m ³ , 0.05ppm	0.2 mg/m ³ , 0.05ppm

Respiratory protection Ensure there is good room ventilation. Do not inhale vapour, aerosols, and mist. Wear respiratory protection. Respirator with type ABEK-P2 combination filter. (e.g. FFP2 EN149:2001 or equivalent)

Hand protection Chemical resistant gloves. Natural rubber (NR)/ Polychloroprene (PCP). (EN 374).

Eye protection Chemical goggles or face shield. (e.g. EN 166).



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Body protection

Avoid contaminating clothes with product. Immediately change moistened or saturated work clothes. Immediately rinse contaminated or saturated clothing with water. Wear: PVC or other impermeable suit (suitable materials – PVC, neoprene, nitrile rubber (NBR), rubber). PVC or rubber boots.

Protective measures

Handle in accordance with good industrial hygiene and safety practice. Wear suitable protective clothing, gloves and eye/face protection. The personal protective equipment used must meet the requirements of Directive 89/686/EEC and amendments (CE certification). It should be defined in the work place in the form of a risk analysis according to Directive 89/686/EEC and amendments. Avoid contact with skin, eyes and clothing. Any contaminated protective equipment is to be cleaned after use. No eating, drinking, smoking or snuffing tobacco at work. Wash face and hands before break and at end of work.

9. Physical & chemical properties

Appearance	Clear colourless liquid	Vapour pressure	No data available
Odour	Aldehydic	Relative density	1.010 – 1.040
pH (1% solution)	5.0 - 7.0	Solubility	No data available
Boiling point/boiling range	No data available	Water solubility	Water soluble
Flash point	No data available	Partition coefficient: n-octanol/water	No data available
Flammability (solid, gas)	No data available	Viscosity	No data available
Explosive properties	No data available	Vapour density	No data available
Oxidising properties	No data available	Evaporation rate	No data available

10. Stability & reactivity

Stability	Store away from direct sunlight and excessive temperature.
Materials to avoid	Oxidising agents, Hydrochloric acid. Solutions can cause corrosion and be subsequently discoloured by iron, copper, zinc and nickel alloys.
Conditions to avoid	Extremes of temperature
Hazardous decomposition products	Combustion produces carbon dioxide and Hydrogen Chloride (HCl).
Hazardous reactions	No data supplied

11. Toxicological information

Acute effects	Formaldehyde LD50 (Oral, Rat) 100mg/kg Glutaraldehyde Oral LD50 733mg/kg (rat), Inhalation LC50 0.28-0.38 mg/l/4h (rat)
Sensitisation	Glutaraldehyde Sensitisation possible via inhalation and skin contact
Repeated dose toxicity and CMR effects	Formaldehyde Carcinogen Category 3
Further information	No data supplied

12. Ecological information

Persistence/degradability	Readily biodegradable
Bio-accumulation	Not expected to bioaccumulate
Environmental hazards	Glutaraldehyde LC 50, 96 Hrs, FISH mg/l 10.8, EC 50, 48 Hrs, DAPHNIA, mg/l 10, IC 50, 72 Hrs, ALGAE, mg/l 1.94 Benzalkonium chloride LC 50, 96 Hrs, FISH mg/l 0.93, EC 50, 48 Hrs, DAPHNIA mg/l 0.02, IC 50, 72 Hrs, ALGAE, mg/l 0.07
Further information	No data supplied

13. Disposal considerations

Product disposal	Dispose of in accordance with all applicable local and national regulations.
Container disposal	Contaminated, empty containers must be disposed of as chemical waste. Residual chemical should be disposed of by incineration or by other modes of disposal in compliance with local legislation

14. Transport information

TRANSPORT BY ROAD Rail/Road (RID/ADR)



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Transport denomination Corrosive liquid, NOS. (Glutaraldehyde and Benzalkonium chloride)
Class 8
Subsidiary risk Hazard ID No. 80
UN Number 1760
Packing Group III

TRANSPORT BY SEA IMDG

Transport denomination Corrosive liquid, NOS. (Glutaraldehyde and Benzalkonium chloride)
Class 8
Subsidiary risk *No data supplied*
UN Number 1760
Packing Group III

TRANSPORT BY AIR ICAO / TII/IATA

Transport denomination *No data supplied*
Class *No data supplied*
Subsidiary risk *No data supplied*
UN Number *No data supplied*
Packing Group *No data supplied*

15. Regulatory information

Labelling Toxic, Dangerous for the Environment
Symbol (s) T, N
Risk phrases R23/25 *Toxic by inhalation and if swallowed*
R34 Causes burns.
R40 *Limited evidence of a carcinogenic effect*
R42/43 May cause sensitisation by inhalation and skin contact.
R51 *Toxic to aquatic organisms*
R68 *Possible risk of irreversible effects*
Safety phrases S1/2 Keep locked up and out of the reach of children.
S24/25 Avoid contact with skin and eyes
S27 Take off immediately all contaminated clothing.
S28 After contact with skin wash immediately with plenty of water.
S36/37/39 Wear suitable protective clothing, gloves and eye/face protection.
S38 In case of insufficient ventilation wear suitable respiratory equipment.
S45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
S60 This material and its container must be disposed of as hazardous waste.
S61 Avoid release to the environment. Refer to special instructions/Safety Data Sheet.

16. Other information

Full text of R phrases from section 3.

R21/22 Harmful in contact with skin and if swallowed.
R23/25 Toxic by inhalation and if swallowed.
R23/24/25 Toxic by inhalation, in contact with skin and if swallowed.
R34 Causes burns.
R40 Limited evidence of a carcinogenic effect.
R42/43 May cause sensitisation by inhalation and skin contact.
R43 May cause sensitisation by skin contact.
R50 Very toxic to aquatic organisms.

Training advice.

Those who are to be employed in the use of this product must be given training which highlights the need to handle and use it only in the



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recommended manner and to at all times make use of the prescribed personal protective equipment.

Recommended restrictions on use.

This product should be stored and handled in accordance with guidance given above and used only in the recommended manner and in conformity with any legal requirements

Sources of key data.

The Chemical (Hazard Information for Packaging and Supply) Regulations 2009 (SI 2009:716) and associated documents.

EU Council Directive 75/442/EEC (as amended).

HSE Guidance Note EH40 2007

The European Agreement Concerning the Carriage of Dangerous Goods by Road (ADR), 2009 Edition.

The International Maritime Dangerous Goods Code, (IMDG) 2008 Edition.

The International Air Transport Association Dangerous Goods Regulations, (IATA), 2010 Edition.

Safety Data Sheets provided by suppliers of component substances.

This safety data sheet has been supplied in accordance with the requirements of Article 31 of Regulation EC No 1907/2006 (the REACH regulation) and the information contained herein is displayed in the order prescribed in Annex II to that regulation, as amended 2010. Its purpose is to facilitate the carrying out of a risk assessment. Employers are reminded of their duty to carry out such an assessment and subsequently to provide an appropriate working environment, to make available to those who are required to use this product all necessary personal protective equipment and to ensure that such equipment is used.

The safety data sheet is additional to the technical data sheet but does not replace it. The information given herein is to the best of our knowledge correct and given in good faith. It relates to the product in the state in which it is delivered. This product is for the uses specified and should only be used for those purposes. Any other use may involve risks. The user will take sole responsibility for the precautions relating to the use of the product. It is intended to describe our products from the point of view of safety requirements and is not intended to guarantee any particular properties.

Kilco (International) Ltd. Registered Office: IA Trench Road, Mallusk, Newtownabbey, Belfast. BT36 4TY
Registration Number: Ireland NI3240 Place of Registration: Northern Ireland