

# **Kanco** SystemSafe KS7 Central Heating BIOCIDE Safety Data Sheet

# Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878 Issue date: 10/04/2025 Version: 1.0

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

### **1.1. Product identifier**

Product form	: Mixture
Product name	: SystemSafe KS7 Central Heating BIOCIDE
UFI	: 4120-G081-700U-XJCR
Type of product	: Biocidal products (e.g. Disinfectants, pest control)
Other means of identification	: 500ml - Product Code: BSB001 EAN13: 5060134591909

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

### **Uses advised against**

Restrictions on use

: Not suitable for use in PRIMATIC single feed cylinders

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

### Supplier

Kamco Limited Unit 9 Curo Park Frogmore AL2 2DD St Albans UK T 01727 875020 info@kamco.co.uk, www.kamco.co.uk

# 1.4. Emergency telephone number

Country/Area	Organisation/Company	Address	Emergency number	Comment
Ireland	National Poisons Information Centre Beaumont Hospital	PO Box 1297 Beaumont Road 9 Dublin	+353 1 809 2566 (Healthcare professionals- 24/7) +353 1 809 2166 (public, 8am - 10pm, 7/7)	
United Kingdom	National Poisons Information Service (Birmingham Centre) City Hospital	Dudley Road B18 7QH Birmingham	0344 892 0111	Only for healthcare professionals
United Kingdom	National Poisons Information Service (Belfast Centre) Royal Victoria Hospital	Grosvenor Road BT12 6BA Belfast	0344 892 0111	Only for healthcare professionals

# **SECTION 2: Hazards identification**

Classification according to Regulation (EC) No. 1272/2008	3 [CLP]
Serious eye damage/eye irritation, Category 2	H319
Hazardous to the aquatic environment – Acute Hazard,	H400
Category 1	

Full text of H- and EUH-statements: see section 16

#### Adverse physicochemical, human health and environmental effects

Causes serious eye irritation. Very toxic to aquatic life.

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2.2. Label elements	
Labelling according to Regulation (EC)	No. 1272/2008 [CLP]
Hazard pictograms (CLP)	
	GHS07 GHS09
Signal word (CLP)	: Warning
Contains	: bronopol
Hazard statements (CLP)	: H319 - Causes serious eye irritation. H400 - Very toxic to aquatic life.
Precautionary statements (CLP)	<ul> <li>P102 - Keep out of reach of children.</li> <li>P264 - Wash contaminated skin thoroughly after handling.</li> <li>P273 - Avoid release to the environment.</li> <li>P280 - Wear protective gloves, protective clothing, eye protection, face protection.</li> <li>P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.</li> <li>P337+P313 - If eye irritation persists: Get medical advice/attention.</li> </ul>

#### 2.3. Other hazards

Contains no PBT and/or vPvB substances ≥ 0.1% assessed in accordance with REACH Annex XIII

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or substance(s) are not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %

### SECTION 3: Composition/information on ingredients

### 3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
bronopol	CAS-No.: 52-51-7 EC-No.: 200-143-0 EC Index-No.: 603-085-00-8 REACH-no: 01-2119980938- 15	< 3	Acute Tox. 4 (Dermal), H312 (ATE=1100 mg/kg bodyweight) Acute Tox. 4 (Oral), H302 (ATE=500 mg/kg bodyweight) STOT SE 3, H335 Skin Irrit. 2, H315 Eye Dam. 1, H318 Aquatic Acute 1, H400 (M=10)

Full text of H- and EUH-statements: see section 16

# **SECTION 4: First aid measures**

4.1. Description of first aid measures

First-aid measures general	: If you feel unwell, seek medical advice (show the label where possible).
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact	: Wash skin with plenty of water.
First-aid measures after eye contact	: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
First-aid measures after ingestion	: Call a poison center or a doctor if you feel unwell.

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4.2. Most important symptoms and effects,	both acute and delayed
Symptoms/effects	: Causes serious eye irritation.
Symptoms/effects after inhalation	: May cause irritation to the respiratory tract, sneezing, coughing, burning sensation of throat with constricting sensation of the larynx and difficulty in breathing.
Symptoms/effects after skin contact	: Irritation.
Symptoms/effects after eye contact	: Eye irritation.
Symptoms/effects after ingestion	: Burns or irritation of the linings of the mouth, throat, and gastrointestinal tract.

### 4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures	
5.1. Extinguishing media	
Suitable extinguishing media	: Water spray. Dry powder. Foam. Carbon dioxide.
5.2. Special hazards arising from the subst	tance or mixture
Hazardous decomposition products in case of fire	: Toxic fumes may be released.
5.3. Advice for firefighters	
Protection during firefighting	: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures		
6.1. Personal precautions, protective	e equipment and emergency procedures	
For non-emergency personnel		
Emergency procedures	: Ventilate spillage area. Avoid contact with skin and eyes.	
For emergency responders		
Protective equipment	: Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".	
6.2. Environmental precautions		
Avoid release to the environment.		
6.3. Methods and material for containment and cleaning up		
For containment	: Collect spillage.	

Methods for cleaning up Other information	<ul><li>Take up liquid spill into absorbent material.</li><li>Dispose of materials or solid residues at an authorized site.</li></ul>
6.4. Reference to other sections	

For further information refer to section 13.

SECTION 7: Handling and storage		
7.1. Precautions for safe handling		
Precautions for safe handling	: Ensure good ventilation of the work station. Avoid contact with skin and eyes. Wear personal protective equipment.	
Hygiene measures	: Do not eat, drink or smoke when using this product. Always wash hands after handling the product.	
7.2. Conditions for safe storage, i	ncluding any incompatibilities	
Storage conditions	: Store in a well-ventilated place. Keep cool.	

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### 7.3. Specific end use(s)

No additional information available

# SECTION 8: Exposure controls/personal protection

# 8.1. Control parameters

### DNEL and PNEC

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bronopo	I (52-51-7)
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DNEL/DMEL (Workers)		
Acute - systemic effects, dermal	6 mg/kg bodyweight/day	
Acute - systemic effects, inhalation	10.5 mg/m³	
Acute - local effects, dermal	8 μg/cm²	
Acute - local effects, inhalation	2.5 mg/m³	
Long-term - systemic effects, dermal	2 mg/kg bodyweight/day	
Long-term - local effects, dermal	8 μg/cm²	
Long-term - systemic effects, inhalation	3.5 mg/m <sup>3</sup>	
Long-term - local effects, inhalation	2.5 mg/m³	
DNEL/DMEL (General population)		
Acute - systemic effects, dermal	2.1 mg/kg bodyweight/day	
Acute - systemic effects, inhalation	1.8 mg/m³	
Acute - systemic effects, oral	0.5 mg/kg bodyweight/day	
Acute - local effects, dermal	4 μg/cm <sup>2</sup>	
Acute - local effects, inhalation	0.6 mg/m³	
Long-term - systemic effects,oral	0.18 mg/kg bodyweight/day	
Long-term - systemic effects, inhalation	0.6 mg/m³	
Long-term - systemic effects, dermal	0.7 mg/kg bodyweight/day	
Long-term - local effects, dermal	4 μg/cm <sup>2</sup>	
Long-term - local effects, inhalation	0.6 mg/m³	
PNEC (Water)		
PNEC aqua (freshwater)	0.01 mg/l	
PNEC aqua (marine water)	0.0008 mg/l	
PNEC aqua (intermittent, freshwater)	0.0025 mg/l	
PNEC (Sediment)		
PNEC sediment (freshwater)	0.041 mg/kg dwt	
PNEC sediment (marine water)	0.00328 mg/kg dwt	
PNEC (Soil)		
PNEC soil	0.5 mg/kg dwt	
PNEC (STP)		
PNEC sewage treatment plant	0.43 mg/l	

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### 8.2. Exposure controls

### Appropriate engineering controls

Appropriate engineering controls:

Ensure good ventilation of the work station.

### Personal protection equipment

Personal protective equipment symbol(s):



#### Eye and face protection

Eye protection: Safety glasses

### Skin protection

**Skin and body protection:** Wear suitable protective clothing

Hand protection: Protective gloves

#### **Respiratory protection**

### **Respiratory protection:**

In case of insufficient ventilation, wear suitable respiratory equipment

### **Environmental exposure controls**

Environmental exposure controls:

Avoid release to the environment.

# **SECTION 9: Physical and chemical properties**

### 9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Colour	: light yellow. Colourless.
Appearance	: Water-white to pale yellow liquid.
Odour	: slight.
Odour threshold	: Not available
Melting point	: Not applicable
Freezing point	: -2 °C
Boiling point	: 100 °C
Flammability	: Not applicable
Lower explosion limit	: Not available
Upper explosion limit	: Not available
Flash point	: Not available
Auto-ignition temperature	: Not available
Decomposition temperature	: Not available
pH	: 3 – 5
Viscosity, kinematic	: Not available
Solubility	: Soluble in water.
Partition coefficient n-octanol/water (Log Kow)	: Not available
Vapour pressure	: Not available
Vapour pressure at 50°C	: Not available
Density	: Not available
Relative density	: ≈ 1.01
Relative vapour density at 20°C	: Not available
Particle characteristics	: Not applicable

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### 9.2. Other information

No additional information available

# SECTION 10: Stability and reactivity

### 10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

**10.2. Chemical stability** 

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

**10.4. Conditions to avoid** 

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

No additional information available

**10.6. Hazardous decomposition products** 

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

11.1. Information on hazard classes	as defined in Regulation (EC) No 1272/2008
Acute toxicity (oral) Acute toxicity (dermal) Acute toxicity (inhalation)	<ul> <li>Not classified</li> <li>Not classified</li> <li>Not classified</li> </ul>
bronopol (52-51-7)	
LD50 dermal rat	> 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)
Skin corrosion/irritation	: Not classified pH: 3 – 5
Serious eye damage/irritation	: Causes serious eye irritation. pH: 3 – 5
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified
bronopol (52-51-7)	
STOT-single exposure	May cause respiratory irritation.
STOT-repeated exposure	: Not classified
Aspiration hazard	: Not classified

No additional information available

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SECTION 12: Ecological information			
12.1. Toxicity			
Hazardous to the aquatic environment, short-term : (acute)	Very toxic to aquatic life. Very toxic to aquatic life. Not classified		
bronopol (52-51-7)			
EC50 - Crustacea [1]	1.4 mg/l Test organisms (species): Daphnia magna		
EC50 72h - Algae [1]	0.25 mg/l Test organisms (species): Skeletonema costatum		
EC50 72h - Algae [2]	0.37 mg/l Test organisms (species): Raphidocelis subcapitata (previous names: Pseudokirchneriella subcapitata, Selenastrum capricornutum)		
LOEC (chronic)	0.88 mg/l Test organisms (species): Daphnia magna Duration: '21 d'		
NOEC (chronic)	0.27 mg/l Test organisms (species): Daphnia magna Duration: '21 d'		
NOEC chronic fish	21.5 mg/l Test organisms (species): Oncorhynchus mykiss (previous name: Salmo gairdneri) Duration: '49 d'		
12.2. Persistence and degradability			
SystemSafe KS7 Central Heating BIOCIDE			
Persistence and degradability	Not rapidly degradable		
bronopol (52-51-7)			
Persistence and degradability	Not rapidly degradable		
12.3. Bioaccumulative potential			
No additional information available			
12.4. Mobility in soil			
No additional information available			
12.5. Results of PBT and vPvB assessment			
No additional information available			
12.6. Endocrine disrupting properties			
No additional information available			

12.7. Other adverse effects

No additional information available

SECTION 13: Disposal considerations	
13.1. Waste treatment methods	
Waste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions.

# SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID

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ADR	IMDG	ΙΑΤΑ	ADN	RID	
14.1. UN number or ID number					
UN 3082	UN 3082	UN 3082	UN 3082	UN 3082	
14.2. UN proper shipping name					
ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.	Environmentally hazardous substance, liquid, n.o.s.	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.	
Transport document descri	iption				
UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., 9, III, (-)	UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., 9, III, MARINE POLLUTANT	UN 3082 Environmentally hazardous substance, liquid, n.o.s., 9, III	UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., 9, III	UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., 9, III	
14.3. Transport hazard c	lass(es)				
9	9	9	9	9	
14.4. Packing group					
III	III	III	III	III	
14.5. Environmental haz	ards				
Dangerous for the environment: Yes	Dangerous for the environment: Yes Marine pollutant: Yes EmS-No. (Fire): F-A EmS-No. (Spillage): S-F	Dangerous for the environment: Yes	Dangerous for the environment: Yes	Dangerous for the environment: Yes	
No supplementary informatio	n available	1		I	

### 14.6. Special precautions for user

Overland transport		
Classification code (ADR)	:	M6
Special provisions (ADR)	:	274, 335, 375, 601
Limited quantities (ADR)	:	51
Excepted quantities (ADR)	:	E1
Packing instructions (ADR)	:	P001, IBC03, LP01, R001
Special packing provisions (ADR)	:	PP1
Mixed packing provisions (ADR)	:	MP19
Portable tank and bulk container instructions (ADR)	:	T4
Portable tank and bulk container special provisions	:	TP1, TP29
(ADR)		
Tank code (ADR)	:	LGBV
Vehicle for tank carriage	:	AT
Transport category (ADR)	:	3
Special provisions for carriage - Packages (ADR)	:	V12
Special provisions for carriage - Loading, unloading	:	CV13
and handling (ADR)		
Hazard identification number (Kemler No.)	:	90

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Orange plates	<sup>:</sup> 90
	<u>90</u> 3082
Tunnel restriction code (ADR)	: -
EAC code	: •3Z
Transport by sea	
Special provisions (IMDG)	: 274, 335, 969
Limited quantities (IMDG) Excepted quantities (IMDG)	: 5L : E1
Packing instructions (IMDG)	: LP01, P001
Special packing provisions (IMDG)	: PP1
IBC packing instructions (IMDG)	IBC03
Tank instructions (IMDG)	: T4
Tank special provisions (IMDG)	: TP1, TP29
Stowage category (IMDG)	: A
Air transport	
PCA Excepted quantities (IATA)	: E1
PCA Limited quantities (IATA)	: Y964
PCA limited quantity max net quantity (IATA) PCA packing instructions (IATA)	: 30kgG : 964
PCA max net quantity (IATA)	: 450L
CAO packing instructions (IATA)	: 964
CAO max net quantity (IATA)	: 450L
Special provisions (IATA)	: A97, A158, A197, A215
ERG code (IATA)	: 9L
Inland waterway transport	
Classification code (ADN)	: M6
Special provisions (ADN)	: 274, 335, 375, 601
Limited quantities (ADN) Excepted quantities (ADN)	: 5L : E1
Carriage permitted (ADN)	: T
Equipment required (ADN)	: PP
Number of blue cones/lights (ADN)	: 0
Rail transport	
Classification code (RID)	: M6
Special provisions (RID)	: 274, 335, 375, 601
Limited quantities (RID)	: 5L
Excepted quantities (RID) Packing instructions (RID)	: E1
Special packing provisions (RID)	: P001, IBC03, LP01, R001 : PP1
Mixed packing provisions (RID)	: MP19
Portable tank and bulk container instructions (RID)	: T4
Portable tank and bulk container special provisions	TP1, TP29
(RID)	
Tank codes for RID tanks (RID)	: LGBV
Transport category (RID)	: 3
Special provisions for carriage – Packages (RID)	: W12
Special provisions for carriage - Loading, unloading	: CW13, CW31
and handling (RID)	
Colis express (express parcels) (RID) Hazard identification number (RID)	: CE8 : 90
14.7 Maritimo transport in bulk according t	o IMO instrumento

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

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# SECTION 15: Regulatory information 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture EU-Regulations REACH Annex XVII (Restriction List)

Contains no substance(s) listed on REACH Annex XVII (Restriction Conditions)

#### **REACH Annex XIV (Authorisation List)**

Contains no substance(s) listed on REACH Annex XIV (Authorisation List)

### **REACH Candidate List (SVHC)**

Contains no substance(s) listed on the REACH Candidate List

#### **PIC Regulation (Prior Informed Consent)**

Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)

#### **POP Regulation (Persistent Organic Pollutants)**

Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

#### Ozone Regulation (2024/590)

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 2024/590 on substances that deplete the ozone layer)

### Council Regulation (EC) for the control of dual-use items

Contains no substance subject to the COUNCIL REGULATION (EC) for the control of dual-use items

### **Explosives Precursors Regulation (2019/1148)**

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

#### Drug Precursors Regulation (273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

#### 15.2. Chemical safety assessment

No chemical safety assessment has been carried out

# **SECTION 16: Other information**

Abbreviations and acronyms:		
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways	
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road	
ATE	Acute Toxicity Estimate	
BCF	Bioconcentration factor	
BLV	Biological limit value	
BOD	Biochemical oxygen demand (BOD)	
COD	Chemical oxygen demand (COD)	
DMEL	Derived Minimal Effect level	
DNEL	Derived-No Effect Level	
EC-No.	European Community number	
EC50	Median effective concentration	
EN	European Standard	
IARC	International Agency for Research on Cancer	
ΙΑΤΑ	International Air Transport Association	

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Abbreviations and acronyms:		
IMDG	International Maritime Dangerous Goods	
LC50	Median lethal concentration	
LD50	Median lethal dose	
LOAEL	Lowest Observed Adverse Effect Level	
NOAEC	No-Observed Adverse Effect Concentration	
NOAEL	No-Observed Adverse Effect Level	
NOEC	No-Observed Effect Concentration	
OECD	Organisation for Economic Co-operation and Development	
OEL	Occupational Exposure Limit	
PBT	Persistent Bioaccumulative Toxic	
PNEC	Predicted No-Effect Concentration	
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail	
SDS	Safety Data Sheet	
STP	Sewage treatment plant	
ThOD	Theoretical oxygen demand (ThOD)	
TLM	Median Tolerance Limit	
VOC	Volatile Organic Compounds	
CAS-No.	Chemical Abstract Service number	
N.O.S.	Not Otherwise Specified	
vPvB	Very Persistent and Very Bioaccumulative	
ED	Endocrine disruptor	

Full text of H- and EUH-statements:		
Acute Tox. 4 (Dermal)	Acute toxicity (dermal), Category 4	
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4	
Aquatic Acute 1         Hazardous to the aquatic environment – Acute Hazard, Category 1		
Eye Dam. 1	Serious eye damage/eye irritation, Category 1	
Skin Irrit. 2	Skin corrosion/irritation, Category 2	
STOT SE 3	Specific target organ toxicity – Single exposure, Category 3, Respiratory tract irritation	
H302	Harmful if swallowed.	
H312	Harmful in contact with skin.	
H315	Causes skin irritation.	
H318	Causes serious eye damage.	
H319	Causes serious eye irritation.	
H335	May cause respiratory irritation.	
H400	Very toxic to aquatic life.	

Safety Data Sheet (SDS), EU

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DISCLAIMER OF LIABILITY The information in this SDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or methods of handling, storage, use or disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. This SDS was prepared and is to be used only for this product. If the product is used as a component in another product, this SDS information may not be applicable