

SAFETY DATA SHEET


HSC1 PIPEWORK CLEANER

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Section 1: Identification of the substance/ mixture and of the company/ undertaking

Product identifier	
Product Name	HSC1 Pipework Cleaner
Relevant identified uses of the substance or mixture and uses advised against	
Identified uses	Industrial strength chlorinated pipe work cleanser especially formulated to neutralise, suspend and remove heavy biological growth, slime and silt from within cooling and heating systems.
Uses advised against	This product is not recommended for any industrial, professional or consumer use other than the identified uses above.
Details of the supplier of the Safety Data Sheet	
Supplier	Applied Thermal Control Limited 39 Hayhill Industrial Estate, Barrow upon Soar, Leicestershire, LE12 8LD. United Kingdom. www.app-therm.com
Telephone Number	+44(0)1530 839998

Section 2: Hazards identification

Classification of the substance or mixture	
Classification - Regulation (EC) No. 1272/2008 (CLP)	<p>Physical and chemical hazards Not classified as a physical or chemical hazard</p> <p>Human health Skin Corr. 1A - H314, Eye Dam. 1 - H318</p> <p>Environment Not classified as an environmental hazard</p>
Label elements	
EC No.	N/A
Labelling - Regulation (EC) No. 1272/2008 (CLP)	
Signal Word	Danger

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Section 2 Continued: Hazards identification

Hazard statements	H314 - Causes severe burns and eye damage H318 - Cause serious eye damage
Precuatory statements	P260 - Do not breathe dust/fumes/gas/mist/vapours/spray P264 - Wash hands thoroughly after handling P280 - Wear protective gloves, eye and face protection P303+P361+P353 - IF ON SKIN (or hair): 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
Other hazards	This product does not meet the PBT/vPvB criteria of REACH, annex XIII.

Section 3: Composition/information on ingredients

Mixtures	
Component - Sodium hydroxide	Concentration - 5-15% EC No. - 215-186-5 CAS No. - 1310-73-2 Reach registration No. - 01-2119457892-27
Classification - Regulation (EC) No. 1272/2008 (CLP)	Met. Corr. 1 - H290 Skin Corr. 1A - H314
Component - Sodium hypochlorite.	Concentration - 0.5-2.25% EC No. - 231-668-3 CAS No. - 7681-52-9 Reach registration No. - 01-2119488154-34
Classification - Regulation (EC) No. 1272/2008 (CLP)	Met. Corr. 1 - H290 Skin Corr. 1B - H314 Aquatic Acute 1 - H400 Aquatic Chronic 2 - H411 Sodium hypochlorite has an M factor = 10

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Section 4: First aid procedures

Description of first aid procedures	
General Information	When safe to do so remove the victim from the source of exposure giving consideration as to whether this may cause further discomfort to the victim.
Inhalation	Move affected person to fresh air at once and keep warm in a position comfortable for breathing. If breathing becomes difficult, properly trained personnel may assist the victim by supplying oxygen to ease breathing. If breathing stops, perform artificial respiration. Get medical attention if any discomfort continues.
Ingestion	Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Rinse mouth thoroughly with water. If victim becomes unconscious, place them in the recovery position to ensure breathing can take place. Get medical attention if any discomfort continues.
Skin Contact	Remove contaminated clothing immediately and wash skin with soap and water. Continue to wash skin/shower for at least 15 minutes. Get medical attention if any discomfort continues.
Eye Contact	Rinse immediately with plenty of water. Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes. Get medical attention if any discomfort continues.
Most important symptoms and effects, both acute and delayed	
General Information	The following symptoms are listed in case of exposure to the 100% neat product.
Inhalation	Inhalation of vapours may result in soreness of the throat, mouth and nose.
Ingestion	May cause chemical burns in mouth, oesophagus and stomach.
Skin Contact	Direct contact is expected to cause chemical burns to the skin.
Eye Contact	Risk of serious damage to the eyes with direct contact. May also result in permanent eye damage.
Indication of immediate medical needs or special treatment	
No specific recommendations given, but first aid may still be required in case of accidental exposure, inhalation or ingestion of this chemical. If in doubt, get medical attention promptly and present a copy of this Safety Data Sheet.	
Notes for the doctor	Contains sodium hydroxide and sodium hypochlorites in an aqueous solution. Rinse well with water to neutral pH. If mixed with acidic material chlorine gas will be evolved. Check for respiratory disorders.

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Section 5: Firefighting measures

Extinguishing media	
This product is non-combustible. Use fire-extinguishing media suitable for putting out the surrounding fire.	
Special hazards arising from the substance or mixture	
Specific Hazards	On heating corrosive vapours may be formed. Contact with acids liberates chlorine gas.
Unusual fire and explosion hazards	Contact with some metals (e.g. aluminium, zinc and their alloys) may liberate hydrogen gas which may form an explosive mixture with the air.
Advice for firefighting	
Protective actions during firefighting	Move containers away from fire area if this can be done without risk. Keep people away, isolate the fire and deny unnecessary entry. Use water fog to keep fire-exposed containers cool and disperse vapours. Runoff water should be prevented from entering sewers and watercourses.
Specialist protective equipment for	Wear positive-pressure self-contained breathing apparatus (SCBA) and full Fire fighters protective clothing.

Section 6: Procedure for unwanted emissions

Personal precautions, protective equipment and emergency procedures	
Personal precautions	In the case of inadequate ventilation, use respiratory protection.
Protective Equipment	Wear protective clothing as described in Section 8 of this Safety Data Sheet.
Emergency Procedures	Stop leak/release if possible to do so without risk. Extinguish all ignition sources if safe to do so. Warn everybody of potential danger and evacuate if necessary.
Environmental precautions	
Do not discharge into drains, water courses or onto the ground. Spillages or uncontrolled discharges into watercourses must be reported immediately to the Environmental Agency or other appropriate regulatory body.	
Methods and materials for containment and clean up	
Absorb spillage with inert, damp, non-combustible material, then flush the contaminated area with water. Containers with collected spillage should be appropriately labelled with the correct contents and hazard labels. Collect and place unsuitable waste disposal containers and seal securely. For waste disposal, see Section 13.	
Reference to other sections - Wear protective clothing as described in Section 8 of this Safety Data Sheet. Collect and dispose of spillage as indicated in Section 13.	

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Section 7: Handling and storage

Precautions for safe handling
Avoid spilling and contact with the skin and the eyes. Avoid inhalation of vapours and spray mists. Provide good ventilation. Do not eat, drink or smoke in work areas and wash hands after handling this product. Wear suitable protective equipment for prolonged exposure and/or high concentrations of vapours, spray or mist.
Conditions for safe storage including any compatibilities
Store in tightly-closed, original containers in a cool, well-ventilated space. Keep separate from food, feedstuffs, fertilisers and other sensitive material. Store between 0°C and 30°C. Store in a demarcated bunded area to prevent release into drains and/or watercourses. Keep away from acids.
Specific end use(es)
The identified uses for this product are detailed in Section 1.2.

Section 8: Exposure controls / Personal protection


Control parameters					
Name	STD	TWA-8 Hrs	STEL-15 Min	DNEL	PNEC
Sodium hydroxide	WEL	Not available	2 mg/m ³	Industry, Inhalation - Long term local effects: 1.0 mg/m ³ Industry, Dermal - Short term local effects: 2%	No PNEC data available
Sodium hypochlorite	WEL	Not available	Not available	Industry, Inhalation - Long term local effects: 1.55 mg/m ³ Industry, Inhalation - Long term systemic effects: 1.55 mg/m ³ Industry, Inhalation - Short term local effects: 3.1 mg/m ³ Industry, Inhalation - Short term systemic effects: 3.1 mg/m ³ Industry, Dermal - Long term local effects: 0.5% wt/wt	Sediment (fresh water): 0.21 µg/L Sediment: 0.042 µg/L Intermittent release: 0.26 µg/L Fresh water: 30 µg/L/12

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Section 8 Continued: Exposure controls / Personal protection

Exposure controls	
	
Technical procedures	
Engineering Measures	Methods to prevent or control exposure are preferred. Provide adequate ventilation to minimise the risk of inhalation of sprays and mists.
Hygiene Measures	Handle in accordance with good industrial hygiene and safety practices. Wash hands after handling this product and at the end of each work shift. Routinely wash work clothing and personal protective equipment to remove possible contaminants
Respiratory Equipment	If ventilation is inadequate, suitable respiratory protection must be worn.
Hand Protection	PVC/butyl rubber/neoprene gloves are recommended.
Eye Protection	Wear approved chemical goggles or face shield.
Skin Protection	Wear rubber apron or protective clothing in case of contact.
Other Protection	Wear suitable protective clothing/footwear as protection against splashing or contamination.
Thermal Hazards	No specific measures required.
Environmental Exposure Controls	Product not classified as an environmental hazard, but contains a substance classified as hazardous to environment.

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Section 9: Physical and chemical properties

Information on basic physical and chemical properties	
Appearance	Clear liquid
Colour	Pale yellow
Odour	Chlorine/bleach
Odour Threshold	Not applicable
pH	12.5 (1% conc. solution)
Melting point / Pour point	<0°C
Initial boiling point	No test data available
Flash point	Not applicable - product contains no flammable components
Evaporation Rate	No test data available
Flammability	Not applicable - product contains no flammable components
Flammability / explosion limits	No test data available
Vapour pressure	No test data available
Vapour density (air = 1)	No test data available
Relative density of the mixture	1.05 - 1.2
Solubility	Soluble in water
Partition coefficient: n-octanol / water	No test data available
Auto-ignition temperature	Not applicable - product contains no flammable components
Decomposition temperature	No test data available
Viscosity	See product data sheet
Explosive properties	Not applicable - product is not classified as an explosive
Oxidising properties	Not applicable - product is not classified as an oxidising agent
Other information	
Not determined.	

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Section 10: Stability and reactivity

Reactivity	Avoid contact with acidic material. This will generate heat and irritant/potentially corrosive vapours.
Chemical stability	Stable under normal conditions and during recommended use. Product decomposes over time to produce oxygen.
Possibility of hazardous reactions	Upon contact with acid, chlorine gas may evolve.
Conditions to avoid	Avoid excessive heat for prolonged periods of time.
Incompatible materials	Acidic materials, some metals (e.g. aluminium, zinc, tin, copper and their alloys).
Hazardous decomposition products	Natural decomposition (especially in warm conditions or in direct sunlight) will evolve oxygen gas.

Section 11: Toxicological information

Information on toxicological effects	
Acute toxicity	No toxicity data available.
Skin corrosion/ irritation	Direct skin contact is expected to cause chemical burns to the skin.
Serious eye damage/ irritation	Risk of serious damage to the eyes. Direct contact may result in permanent eye damage.
Respiratory/ skin sensitisation	Product not classified as a skin/respiratory sensitizer.
Germ cell mutagenicity	Product is not expected to be mutagenic.
Carcinogenicity	Product is not expected to be carcinogenic.
Reproductive toxicity	Product is not expected to damage the reproductive system or harm a developing foetus.
Evaluation of CMR properties	No test data available.
STOT-single exposure	No test data available.
STOT-repeated exposure	No test data available.
Aspiration hazard	No test data available.

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Section 11 Continued: Toxicological information

General information	
See Section 4.2 of this Safety Data Sheet.	
Inhalation	Inhalation of vapours may cause mild irritation of the upper respiratory tract.
Ingestion	May cause chemical burns to the mouth, oesophagus and stomach.
Skin contact	Direct contact is expected to cause chemical burns to the skin.
Eye contact	Risk of serious damage to the eyes with direct contact. May also result in permanent eye damage.

Section 12: Ecological information

Ecotoxicity	The product is not classified as hazardous to the environment.
Toxicity	No available toxicity data for this product.
Persistence and degradability	Product is expected to be rapidly biodegradable.
Bioaccumulative potential	Will not bio-accumulate. Partition coefficient - not determined.
Mobility in soil	Product is mobile in soil as it is water soluble.
Results of PBT and vPvB assessment	This product does not meet the PBT/vPvB criteria of REACH, annex XIII.
Other adverse effects	Not determined

Section 13: Advice on disposal


General information	Waste to be treated as controlled waste. Disposal to licensed waste disposal site in accordance with Local Waste Disposal Authority.
Disposal methods	Dispose of waste and residues in accordance with local authority and/or local sewage treatment plant requirements.

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Section 14: Transport information

UN NO. (ADR/RID)	1824	UN NO. (IMDG)	1824
UN NO. (ICAO)	1824	UN NO. (ADN)	1824
UN Proper shipping name (ADR/RID)	SODIUM HYDROXIDE SOLUTION	UN Proper shipping name (ICAO)	SODIUM HYDROXIDE SOLUTION
UN Proper shipping name (IMDG)	SODIUM HYDROXIDE SOLUTION	UN Proper shipping name (ADN)	SODIUM HYDROXIDE SOLUTION
ADR/RID class	8	ADR/RID label	8
IMDG class	8	ICAO class/division	8
ADN class	8	Transport labels	
ADR/RID packing group	II	IMDG packing group	II
ADN packing group	II	ICAO packing group	II
Environmental hazards	Product not classed as an environmentally hazardous substance or marine pollutant.		
Special precautions for user	EmS - F-A, S-B		
Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable		

Section 15: Regulatory information

Safety, health and environmental regulations / legislation for the substance or mixture	
EU legislation	Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (as amended). Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (as amended).
Guidance notes	CHIP for everyone HSG228. Approved Classification and Labelling Guide (Sixth edition) L131. Safety Data Sheets for substances and preparations.
Chemical safety assessment	No chemical safety assessment for this mixture has been carried out.

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Section 16: Other information

Issued by Thermal Exchange Ltd. Revision Date 21/03/2018. Approved by Graham Wade. Revision Comments Review in line with CLP regulation.

Hazard statements in full

The following hazard statements are the hazard statements 'in full' for the components of this mixture and do not represent the final classifications of this product.

H290 - May be corrosive to metals

H314 - Causes severe burns and eye damage

H400 - Very toxic to aquatic life

H411 - Toxic to aquatic life with long-lasting effects

Further classification and composition comments

Product classifications determined from the specific concentration limits given in Annex I to Regulation (EC) No. 1272/2008 (CLP).

Indication of changes

Safety Data Sheet updated to comply with the new requirements as set out in Regulation (EC) No. 1272/2008 (CLP).

Abbreviations and acronyms

bw: bodyweight

CAS No: Chemical Abstracts Service number

CLP: Classification Labelling and Packaging Regulation

DNEL: Derived No-Effect Level

EC: European Commission

EC No: European Chemical number: EINECS, ELINCS or NLP

ECHA: European Chemicals Agency

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

LC50: Lethal Concentration, 50%

LD50: Median Lethal Dose

PBT: Persistent, Bioaccumulative & Toxic

PNEC: Predicted No Effect Concentration

REACH: Registration, Evaluation, Authorisation & restrictions of Chemicals

SDS: Safety Data Sheet

vPvB: Very Persistent and Very Bioaccumulative

WEL: Workplace Exposure Limit

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Section 16: Other information

Training advice
Product should only be handled by trained operators.
Additional information
The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give advice about the safe handling of the product named in this Safety Data Sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with products or in the case of processing, the information on this Safety Data Sheet is not necessarily valid for the new made-up material.