

SAFETY DATA SHEET

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

1.1 Product identifier

Product name **Formula 429 PLUS**

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

Identified uses Dilute to use sanitising liquid

1.3. Details of the supplier of the safety data sheet

Supplier Chemspec Europe
Unit 36C, Tong Park
Otley Road, Baildon
West Yorkshire BD17 7QD UK
Tel: + 44 (0) 1274 597333
Fax: +44 (0) 1274 597444

1.4. Emergency telephone number

National emergency telephone Chemspec Europe Ltd (office hours only)
Tel: +44 (0) 01274 597333

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification

Physical hazards Met. Corr. 1 - H290
Health hazards Skin Corr. 1B - H314 Skin Sens. 1 - H317 Carc. 2 - H351
Environmental hazards Aquatic Chronic 1 - H410

2.2. Label elements

Pictogram



Signal word

Danger

Hazard statements

H290 May be corrosive to metals.
H314 Causes severe skin burns and eye damage.
H317 May cause an allergic skin reaction.
H351 Suspected of causing cancer.
H410 Very toxic to aquatic life with long lasting effects.

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Precautionary statements	<p>P260 Do not breathe vapour/spray.</p> <p>P273 Avoid release to the environment.</p> <p>P280 Wear protective gloves/protective clothing/eye protection/face protection.</p> <p>P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.</p> <p>P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.</p> <p>P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.</p>
Contains	<p>Didecyldimethylammonium chloride, Quaternary ammonium compounds, benzyl (C12-C16) alkyl dimethyl, chlorides, Polyhexamethylene biguanide hydrochloride</p>
Supplementary precautionary statements	<p>P201 Obtain special instructions before use.</p> <p>P202 Do not handle until all safety precautions have been read and understood.</p> <p>P234 Keep only in original container.</p> <p>P261 Avoid breathing vapour/spray.</p> <p>P264 Wash contaminated skin thoroughly after handling.</p> <p>P272 Contaminated work clothing should not be allowed out of the workplace.</p> <p>P302+P352 IF ON SKIN: Wash with plenty of water.</p> <p>P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.</p> <p>P308+P313 IF exposed or concerned: Get medical advice/attention.</p> <p>P310 Immediately call a POISON CENTER/doctor.</p> <p>P321 Specific treatment (see medical advice on this label).</p> <p>P333+P313 If skin irritation or rash occurs: Get medical advice/attention.</p> <p>P362+P364 Take off contaminated clothing and wash it before reuse.</p> <p>P363 Wash contaminated clothing before reuse.</p> <p>P390 Absorb spillage to prevent material damage.</p> <p>P391 Collect spillage.</p> <p>P405 Store locked up.</p> <p>P406 Store in corrosive resistant/... container with a resistant inner liner.</p> <p>P501 Dispose of contents/container in accordance with national regulations.</p>

2.3. Other hazards

This product does not contain any substances classified as PBT or vPvB.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Didecyldimethylammonium chloride	1-5%
CAS number: 7173-51-5	EC number: 230-525-2
M factor (Acute) = 10	
Classification	
Met. Corr. 1 - H290	
Acute Tox. 3 - H301	
Acute Tox. 4 - H312	
Skin Corr. 1B - H314	
Eye Dam. 1 - H318	
Aquatic Acute 1 - H400	
Aquatic Chronic 1 - H410	

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Quaternary ammonium compounds, benzyl (C12-C16) alkyl dimethyl, chlorides	1-5%
CAS number: 68424-85-1 EC number: 270-325-2 M factor (Acute) = 10 M factor (Chronic) = 1	
Classification Met. Corr. 1 - H290 Acute Tox. 4 - H302 Skin Corr. 1B - H314 Eye Dam. 1 - H318 Aquatic Acute 1 - H400 Aquatic Chronic 1 - H410	
Polyhexamethylene biguanide hydrochloride	1-5%
CAS number: 27083-27-8 M factor (Acute) = 10 M factor (Chronic) = 1	
Classification Acute Tox. 4 - H302 Acute Tox. 2 - H330 Eye Dam. 1 - H318 Skin Sens. 1B - H317 Carc. 2 - H351 STOT RE 1 - H372 Aquatic Acute 1 - H400 Aquatic Chronic 1 - H410	

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation	Not expected to present a significant inhalation hazard under anticipated conditions of normal use.
Ingestion	Do not induce vomiting. Get medical attention if symptoms are severe or persist. Rinse mouth thoroughly with water. Give plenty of water to drink. Never give anything by mouth to an unconscious person.
Skin contact	Rinse immediately contaminated clothing and skin with plenty of water before removing clothes. Get medical attention.
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 and get medical attention.

4.2. Most important symptoms and effects, both acute and delayed

General information No additional information available.

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

Notes for the doctor No additional information available.

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SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media Carbon dioxide (CO₂). Powder. Water spray. Alcohol-resistant foam.

Unsuitable extinguishing media None known.

5.2. Special hazards arising from the substance or mixture

Specific hazards None known.

Hazardous combustion products Toxic gases and fumes may be released in a fire.

5.3. Advice for firefighters

Protective actions during firefighting Use fire-extinguishing media suitable for the surrounding fire. Fight fire with normal precautions from a reasonable distance. Cool containers exposed to heat with water spray and remove them from the fire area if it can be done without risk.

Special protective equipment for firefighters Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel In case of fire: Wear self-contained breathing apparatus. Wear protective clothing, gloves, eye and face protection. Keep unnecessary and unprotected personnel away from the spillage. Eliminate all sources of ignition. Ventilate closed spaces before entering them.

For emergency responders Wear self-contained breathing apparatus. Wear protective clothing, gloves, eye and face protection. Dilute with plenty of water. Do not allow uncontrolled discharge of product into the environment. Evacuate unnecessary personnel.

6.2. Environmental precautions

Environmental precautions Avoid discharge to the aquatic environment.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up Contain spillage with sand, earth or other suitable non-combustible material. Dilute with plenty of water. Contain and dispose of waste according to local regulations.

6.4. Reference to other sections

Reference to other sections No additional information available.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions Use only non-sparking tools. Avoid contact with skin, eyes and clothing.

Advice on general occupational hygiene Do not eat, drink or smoke when using this product. No specific hygiene procedures recommended but good personal hygiene practices should always be observed when working with chemical products.

7.2. Conditions for safe storage, including any incompatibilities

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Storage precautions	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep containers upright. Store in tightly-closed, original container in a dry, cool and well-ventilated place. Protect from freezing and direct sunlight. Avoid contact with oxidising agents. Store at temperatures not exceeding 35°C. Do not store in corrodible metal containers.
Storage class	Corrosive storage.
7.3. Specific end use(s)	
Specific end use(s)	No additional information available.
Usage description	No additional information available.

SECTION 8: Exposure Controls/personal protection

8.1. Control parameters

Occupational exposure limits

No additional information available.

8.2. Exposure controls

Protective equipment



Appropriate engineering controls

Wash hands at the end of each work shift and before eating, smoking and using the toilet. Mechanical ventilation or local exhaust ventilation may be required.

Eye/face protection

Chemical splash goggles. Tight-fitting safety glasses. Personal protective equipment for eye and face protection should comply with European Standard EN166.

Hand protection

To protect hands from chemicals, gloves should comply with European Standard EN374.

Other skin and body protection

Wear suitable protective clothing as protection against splashing or contamination.

Respiratory protection

If ventilation is inadequate, suitable respiratory protection must be worn.

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Appearance	Clear to slightly hazy liquid.
Colour	Colourless to pale yellow.
Odour	Characteristic.
Odour threshold	No information available.
pH	pH (concentrated solution): 6.00 - 8.00
Melting point	No information available.
Initial boiling point and range	No information available.
Flash point	No information available.
Evaporation rate	No information available.
Flammability (solid, gas)	No information available.

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Upper/lower flammability or explosive limits	No information available.
Vapour pressure	No information available.
Vapour density	No information available.
Relative density	0.99-1.01 @ 20°C
Solubility(ies)	Soluble in water.
Partition coefficient	No information available.
Auto-ignition temperature	No information available.
Decomposition Temperature	No information available.
Viscosity	No information available.
Explosive properties	Not considered to be explosive.
Oxidising properties	The mixture itself has not been tested but none of the ingredient substances meet the criteria for classification as oxidising.

9.2. Other information

Other information None.

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity Stable at normal ambient temperatures and when used as recommended.

10.2. Chemical stability

Stability Stable at normal ambient temperatures and when used as recommended.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions Stable at normal ambient temperatures and when used as recommended.

10.4. Conditions to avoid

Conditions to avoid Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

10.5. Incompatible materials

Materials to avoid Anionics. Hypochlorite. Oxidising agents.

10.6. Hazardous decomposition products

Hazardous decomposition products None known.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity - oral

ATE oral (mg/kg) 2,757.38

Acute toxicity - inhalation

ATE inhalation (vapours mg/l) 91.67

Skin corrosion/irritation

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Skin corrosion/irritation	Causes severe skin burns.
<u>Serious eye damage/irritation</u>	
Serious eye damage/irritation	Causes serious eye damage.
<u>Respiratory sensitisation</u>	
Respiratory sensitisation	Not classified.
<u>Skin sensitisation</u>	
Skin sensitisation	May cause an allergic skin reaction.
<u>Germ cell mutagenicity</u>	
Genotoxicity - in vitro	Not classified.
Genotoxicity - in vivo	Not classified.
<u>Carcinogenicity</u>	
Carcinogenicity	Suspected of causing cancer.
<u>Reproductive toxicity</u>	
Reproductive toxicity - fertility	Not classified.
Reproductive toxicity - development	Not classified.
<u>Aspiration hazard</u>	
Aspiration hazard	Not classified.

SECTION 12: Ecological Information

12.1. Toxicity

Toxicity When used as instructed, the product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.

Chronic aquatic toxicity

NOEC 0.01 < NOEC ≤ 0.1

Degradability Non-rapidly degradable

M factor (Chronic) 1

12.2. Persistence and degradability

Persistence and degradability No additional information available.

12.3. Bioaccumulative potential

Partition coefficient No information available.

12.4. Mobility in soil

Mobility No additional information available.

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment No additional information available.

12.6. Other adverse effects

Other adverse effects No additional information available.

SECTION 13: Disposal considerations

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13.1. Waste treatment methods

General information Dispose of waste product or used containers in accordance with local regulations Do not discharge into drains or watercourses or onto the ground. Containers with collected spillage must be properly labelled with correct contents and hazard symbol.

Disposal methods The generation of waste should be minimised or avoided wherever possible.

SECTION 14: Transport information

14.1. UN number

UN No. (ADR/RID)	1760
UN No. (IMDG)	1760
UN No. (ICAO)	1760
UN No. (ADN)	1760

14.2. UN proper shipping name

Proper shipping name (ADR/RID)	CORROSIVE LIQUID, N.O.S. (CONTAINS Quaternary ammonium compounds, benzyl (C12-C16) alkyl dimethyl, chlorides, Didecyldimethylammonium chloride)
Proper shipping name (IMDG)	CORROSIVE LIQUID, N.O.S. (CONTAINS Quaternary ammonium compounds, benzyl (C12-C16) alkyl dimethyl, chlorides, Didecyldimethylammonium chloride)
Proper shipping name (ICAO)	CORROSIVE LIQUID, N.O.S. (CONTAINS Quaternary ammonium compounds, benzyl (C12-C16) alkyl dimethyl, chlorides, Didecyldimethylammonium chloride)
Proper shipping name (ADN)	CORROSIVE LIQUID, N.O.S. (CONTAINS Quaternary ammonium compounds, benzyl (C12-C16) alkyl dimethyl, chlorides, Didecyldimethylammonium chloride)

14.3. Transport hazard class(es)

ADR/RID class	8
ADR/RID classification code	C9
ADR/RID label	8
IMDG class	8
ICAO class/division	8
ADN class	8

Transport labels



14.4. Packing group

ADR/RID packing group	II
IMDG packing group	II
ADN packing group	II
ICAO packing group	II

14.5. Environmental hazards

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Environmentally hazardous substance/marine pollutant



14.6. Special precautions for user

EmS	F-A, S-B
ADR transport category	2
Emergency Action Code	2X
Hazard Identification Number (ADR/RID)	80
Tunnel restriction code	(E)

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable.

SECTION 15: Regulatory information

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

National regulations	No additional information available.
EU legislation	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).

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

SECTION 16: Other information

Revision date	11/05/2015
Revision	1
SDS number	4530
Hazard statements in full	H290 May be corrosive to metals. H301 Toxic if swallowed. H302 Harmful if swallowed. H312 Harmful in contact with skin. H314 Causes severe skin burns and eye damage. H317 May cause an allergic skin reaction. H318 Causes serious eye damage. H330 Fatal if inhaled. H351 Suspected of causing cancer. H372 Causes damage to organs (Respiratory tract) through prolonged or repeated exposure. H400 Very toxic to aquatic life. H410 Very toxic to aquatic life with long lasting effects.

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.