ECHA Microbiology Ltd
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Sig Tests® SIG NITRITE®
SAFETY DATA SHEET

ACCORDING TO EC-REGULATIONS 1907/2006 (REACH), 1272/2008 (CLP) & 2020/878

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier

Product Name	Sig Nitrite Test.
Trade name	Sig Nitrite Test.

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

Identified use(s)	Detecting Nitrite Reducing Bacterial (NRB) contamination of cooling, industrial and environmental waters.
Uses advised against	Not to be used to test any substance / sample of human or animal origin.

1.3 Details of the supplier of the Safety Data Sheet

Manufacturer

Company Identification	ECHA Microbiology Ltd. Unit 22 & 23 Willowbrook Technology Park Llandogo Rd., CARDIFF CF3 0EF United Kingdom (UK).
Telephone	+44 (0)29 2036 5930, +44(0)7908 743709
Fax	+44 (0)29 2036 1195
E-mail	sales@echamicrobiology.com, dcollins@echamicrobiology.com (Derek Collins)

Distributor (Commercial Aviation)

Company Identification	Leki Aviation Amager Landervej 278, Kastrup Denmark 2770
Telephone	+45 3251 9550
E-mail	info@lekiaviation.com

Distributor (Aviation Fuel Supply)

Company Identification	Aljac Fuelling Components Limited Schnackenburgallee 121 Hamburg D-22525 DE – Germany
Telephone	+49 40 6908 4116 (DE), +44 1932 269869 (UK)
E-mail	sales@aljac.com

1.4 Emergency telephone number

Company (United Kingdom)	+44(0)7970 150682 & +44(0)7908 743709

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Regulation (EC) No. 1272/2008 (CLP)	Not classified as hazardous for supply.

2.2 Label elements

According to Regulation (EC) No. 1272/2008 (CLP)	
Product name	Sig Nitrite Test.
Hazard Pictogram(s)	None.
Signal word(s)	None.
Hazard statement(s)	None.
Precautionary statement(s)	None.

2.3 Other hazards None known.

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2.4 Additional Information None.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

No component is present at sufficient concentration to require a hazardous classification.
This product contains: >95% Water.

3.1 Substances

Not applicable.

3.2 Mixtures

Hazardous ingredient(s)	%W/W	CAS No.	EC No.	REACH Registration No.	Hazard pictogram(s) and Hazard statement(s)
Potassium Nitrite	≤0.1	7758-09-0	231-832-4	01-2120763964-40-XXXX	GHS03, Ox. Sol. 2; H272, GHS06, Acute Tox. 3; H301, GHS09, Aquatic Acute 1; H400

Hazardous ingredient(s)	CAS No.	Acute Toxicity Estimate (ATE)
Potassium Nitrite	7758-09-0	Acute Tox. 3 (H301) : 300 mg/kg

3.3 Additional Information

Contains no non-classified vPvB substances.
Contains no non-classified substances with a Union workplace exposure limit.
For full text of H/P Statements see section 16.

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures

Inhalation — Unlikely route of exposure.
Skin Contact — Wash with plenty of water/soap.
Eye Contact — Hold eyelids apart and flush eyes with plenty of water for at least 15 minutes. If symptoms persist, obtain medical attention.
Ingestion — Wash out mouth with water. Get medical advice/attention if you feel unwell.

4.2 Most important symptoms and effects, both acute and delayed — Unlikely to be required but if necessary treat symptomatically.

4.3 Indication of any immediate medical attention and special treatment needed — No special requirements.

4.4 Additional Information — Exposure to the content of used test kit: If symptoms occur obtain medical attention.

SECTION 5: FIRE-FIGHTING MEASURES

5.1 Extinguishing Media

Suitable Extinguishing Media — As appropriate for surrounding fire.
Unsuitable Extinguishing Media — None known.

5.2 Special hazards arising from the substance or mixture — This product may give rise to hazardous fumes in a fire. Hazardous decomposition product(s): Carbon monoxide, Carbon dioxide, Smoke.

5.3 Advice for fire-fighters — Fire fighters should wear complete protective clothing including self-contained breathing apparatus. Chemical protection suit.

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SECTION 6: ACCIDENTAL RELEASE MEASURES

Spillage is unlikely to occur unless the glass bottles of the test kit are broken.

6.1	**Personal precautions, protective equipment and emergency procedures**	Caution - spillages may be slippery. Wear protective gloves.
6.2	**Environmental precautions**	Avoid release to the environment.
6.3	**Methods and material for containment and cleaning up**	
	Unused test kit	Contain spillages with sand, earth or any suitable adsorbent material.
	Used test kit	Cover with disinfectant. Wait for at least 10 minutes before recovering for disposal. If broken glass accidentally cuts the skin, clean the wound thoroughly and seek medical advice.
6.4	**Reference to other sections**	See Also Section 8.

SECTION 7: HANDLING AND STORAGE

7.1	**Precautions for safe handling**	With contents added: Wear appropriate personal protective equipment, avoid direct contact. Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling. Wash the contaminated area of body with soap and fresh water. Do not open test bottle after sample addition or if contamination is suspected unless to dispose of as Section 13.
7.2	**Conditions for safe storage, including any incompatibilities**	Keep away from direct sunlight. Keep under: 25 – 30°C.
7.2.1	**Storage Temperature**	
	Unused test kit	Ideal storage temperature: 4 – 10 °C. Keep container tightly closed, in a cool, well ventilated place. Keep in dark place.
	Used test kit	Incubate at 25 - 30°C (or the temperature of the system being tested). If an incubator is not available use a dark warm draught free cupboard at 25 - 30°C.
7.2.2	**Storage Life**	Stable under normal conditions.
7.2.3	**Incompatible materials**	No information available.
7.3	**Specific end use(s)**	Detecting Nitrite Reducing Bacterial (NRB) contamination of cooling, industrial and environmental waters.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters
8.1.1 Occupational Exposure Limits

SUBSTANCE	CAS No.	LTEL (8 hr TWA ppm)	LTEL (8 hr TWA mg/m³)	STEL (ppm)	STEL (mg/m³)	Note
Potassium Nitrite	7758-09-0	-	-	-	-	Not established

Source: UK Workplace Exposure Limits EH40/2005 (Fourth edition, published 2020)

8.2 Exposure controls

8.2.1	Appropriate engineering controls	Ensure adequate ventilation.

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8.2.2	Personal protection equipment	
	Eye/face protection 	Wear protective eye glasses for protection against liquid splashes.
	Skin protection 	Wear protective gloves. Breakthrough time of the glove material: refer to the information provided by the gloves' producer.
	Respiratory protection 	Not normally required.
	Thermal hazards	Not applicable.
8.2.3	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	Gel in a glass bottle.
	Colour	Yellow - Orange.
	Odour	Odourless.
	Melting point/freezing point	90°C
	Boiling point or initial boiling point and boiling range	Not available.
	Flammability	Non-flammable.
	Lower and upper explosion limit	Not applicable.
	Flash Point	Not applicable.
	Auto-ignition temperature	Not applicable.
	Decomposition Temperature	Not available.
	pH	6.0
	Kinematic Viscosity	Not applicable.
	Solubility	Solubility (Water) : Miscible. Solubility (Other) : Not available.
	Partition coefficient n-octanol/water (log value)	Not available.
	Vapour pressure	Not applicable.
	Density and/or relative density	Not available.
	Relative vapour density	Not applicable.
	Particle characteristics	Not applicable.
9.2	**Other information**	None.

SECTION 10: STABILITY AND REACTIVITY

10.1	**Reactivity**	Stable under normal conditions.
10.2	**Chemical stability**	Stable under normal conditions.
10.3	**Possibility of hazardous reactions**	No hazardous reactions known if used for its intended purpose.
10.4	**Conditions to avoid**	Keep away from direct sunlight.
10.5	**Incompatible materials**	No information available.
10.6	**Hazardous decomposition products**	No hazardous decomposition products known.

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SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity - Ingestion	Calculation method : Not classified. Calculated acute toxicity estimate = 303336.69 mg/kg Low acute toxicity. Used test kit: May be harmful microorganisms present (originating from the sample tested) which could cause infection after proliferation in the gel.
Acute toxicity - Skin Contact	Calculation method : Not classified. Low acute toxicity. Used test kit: May be harmful microorganisms present (originating from the sample tested) which could cause infection after proliferation in the gel.
Acute toxicity - Inhalation	Calculation method : Not classified. Low acute toxicity. Used test kit: May be harmful microorganisms present (originating from the sample tested) which could cause infection after proliferation in the gel.
Skin corrosion/irritation	Calculation method : Not classified.
Serious eye damage/irritation	Calculation method : Not classified.
Skin sensitization data	Calculation method : Not classified. It is not a skin sensitiser.
Respiratory sensitization data	Calculation method : Not classified.
Germ cell mutagenicity	Calculation method : Not classified. There is no evidence of mutagenic potential.
Carcinogenicity	Calculation method : Not classified. No evidence of carcinogenicity.
Reproductive toxicity	Calculation method : Not classified. None anticipated.
Lactation	Calculation method : Not classified.
STOT - single exposure	Calculation method : Not classified.
STOT - repeated exposure	Calculation method : Not classified.
Aspiration hazard	Calculation method : Not classified.

11.2 Information on other hazards — None known.

SECTION 12: ECOLOGICAL INFORMATION

12.1	**Toxicity**	Low toxicity to aquatic organisms.
12.2	**Persistence and degradability**	The product is readily biodegradable. Unlikely to persist.
12.3	**Bioaccumulative potential**	The product has low potential for bioaccumulation.
12.4	**Mobility in soil**	Soluble in water.
12.5	**Results of PBT and vPvB assessment**	Not classified as PBT or vPvB.
12.6	**Endocrine disrupting properties**	Does not cause endocrine disruption.
12.7	**Other adverse effects**	None anticipated.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Unused test kit	If there is evidence of microbial contamination (i.e pink colouration, turbidity or growth within the gel) then dispose of as used test kits.
Used test kit	Dispose of via an authorised person / licensed waste

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	contractor in accordance with local, state or national legislation.
Incineration	Classify as a bio-hazardous infectious test kit showing growth. Incineration may be carried out under controlled conditions provided local regulations for emissions are met by an authorised person / licensed waste contractor.
Disinfection followed by Licensed Waste Contractor	A phenolic or bleach based disinfectant with a chlorine content of about 5% is suitable for making the disinfectant solution. Leave the bottle and its cap in the disinfectant solution overnight.

SECTION 14: TRANSPORT INFORMATION

Not classified as dangerous for transport.

14.1	**UN number or ID number**	Not applicable.
14.2	**UN proper shipping name**	Not applicable.
14.3	**Transport hazard class(es)**	Not applicable.
14.4	**Packing Group**	Not applicable.
14.5	**Environmental hazards**	Not classified as a Marine Pollutant.
14.6	**Special precautions for user**	Not applicable.
14.7	**Maritime transport in bulk according to IMO instruments**	Not applicable.

SECTION 15: REGULATORY INFORMATION

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

European Regulations - Authorisations and/or Restrictions On Use

Candidate List of Substances of Very High Concern for Authorisation	Not listed
REACH: Annex XIV list of substances subject to authorisation	Not listed
REACH: Annex XVII Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles	Not listed
Community Rolling Action Plan (CoRAP)	Not listed
Regulation (EU) N° 2019/1021 of the European Parliament and of the Council on persistent organic pollutants	Not listed
Regulation (EC) N° 2024/590 on substances that deplete the ozone layer	Not listed
Regulation (EU) N° 649/2012 of the European Parliament and of the Council concerning the export and import of hazardous chemicals	Not listed
Seveso Directive	None known.
National regulations	None known.

15.2 Chemical Safety Assessment Not applicable.

SECTION 16: OTHER INFORMATION

The following sections contain revisions or new statements: 1-16.

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LEGEND

Hazard Pictogram(s)

GHS03	GHS: Flame over circle
GHS06	GHS: Skull and crossbones
GHS09	GHS: Environment

Hazard classification

Ox. Sol. 2	Oxidising solid, Category 2
Acute Tox. 3	Acute toxicity, Category 3
Aquatic Acute 1	Hazardous to the aquatic environment, Acute, Category 1

Hazard Statement(s)

H272	May intensify fire; oxidiser.
H301	Toxic if swallowed.
H400	Very toxic to aquatic life.

Acronyms

CAS	Chemical Abstracts Service
CLP	Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures
DNEL	Derived No Effect Level
EC	European Community
EINECS	European Inventory of Existing Commercial Chemical Substances
LTEL	Long Term Exposure Limit
PBT	Persistent, Bioaccumulative and Toxic
PNEC	Predicted No Effect Concentration
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
STEL	Short Term Exposure Limit
STOT	Specific Target Organ Toxicity
vPvB	very Persistent and very Bioaccumulative

Key literature references and sources for data used to compile the SDS

Regulation (EC) No. 1272/2008 (CLP)

Training Advice

Regular safety training as appropriate

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Annex to the extended Safety Data Sheet (eSDS)

Not applicable.

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