

# SAFETY DATA SHEET

Salmonella 4 Cows  
DNA Diagnostic A/S

Revised: 2022.10.13  
Replaces: 2022.09.26

## 1. Product Identification

**Product names:**  
Salmonella 4 Cows

**Catalog No.:**  
S4CB

**Chemical names, common names:**  
Not applicable

**Product use:**  
The kit is for in vitro screening of bovine feces for *Salmonella spp.* and *Salmonella dublin*

**Synonyms:**  
Not applicable

**Manufacturer's name:**  
DNA Diagnostic A/S

**Address:**  
Voldbjergvej 14  
DK-8240 Risskov  
Denmark

**Business phone:** +45 8732 3050

**Web:** [www.dna-diagnostic.com](http://www.dna-diagnostic.com)

**Emergency phone:** Use your local number

## 2. Hazards identification

**Classification of the substance or mixture according to 1272/2008 CLP**  
One product component have a constituent that requires it is classified; Buffer F.

Serious eye damage – category 1 – H318  
Chronic aquatic toxicity – category 3 – H412

**Hazard statements**  
H318 - causes serious eye damage  
H412 - harmful to aquatic life with long-lasting effects

**Precautionary statements**  
P280 Wear protective gloves and eye protection  
P305 + P351+ P338 +P310: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER  
P273 Avoid release to the environment  
P501 Dispose of contents/container according to national legislation

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## Label Elements 1272/2008 CLP



Signal word: **Danger**

### Other Hazards

The product does not meet the criteria for PBT or vPvB.

## 3. Composition / Information of Ingredients

The Salmonella for Cows Kit consists of one large box and one small box.

Large box, stored at room temperature, contains:

- One bottle of Buffer P (30 mL)
- Four bottles of 110 mL Wash Buffer
- Four 2mL Deep well plates with 650  $\mu$ L beads solution
- Four 96-well titer plates with lid
- Sixteen Seals for Deep Well plates
- Four 96-well titer lids

Small box, stored at -20°C, contains:

- Two bottles of Lysis Buffer E (12 mL per bottle)
- Two 2 mL tubes with Additive for Lysis Buffer (1334  $\mu$ L / tube)
- Four 96-well plates with Master Mix S4CB

Packed separately, stored at room temperature:

- One to six bottles of buffer F (520 mL per bottle)

The following components have a constituent that are either classified, have occupational exposure limits or biological constituents.

Buffer F:

CAS/EC-no.	REACH No	Name	Content%	Classification CLP
9036-19-5/-		polyethylene glycol octylphenyl ether	<10%	Acute toxicity – category 4 – oral – H302 Serious eye damage – category 1 – H318 Chronic aquatic toxicity – category 2 – H412

qPCR reaction mix and Additive for Lysis buffer:

CAS/EC-no.	REACH No	Name	Content%	Classification CLP
56-81-5/ 200-289-5	-	Glycerol	<10%	-

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## Additional information

See full text of H-phrases in section 16. Occupational limits are listed in section 8, if these are available.

## Special note regarding Biological Constituents

The Biological Constituents of this product are known to be non-infectious and non-hazardous. When this product is used in conjunction with bodily fluids UNIVERSAL PRECAUTIONS SHOULD BE IMPLEMENTED.

## 4. First aid measures

### Emergency overview

Water is the main component of all solutions.

Occupational exposure presents little or no health hazard, however there are exposure limits for glycerol see section 8.

### First aid measures

Basic hygiene should prevent any problems. If contact with this product leads to reddening, inflammation, or other skin or eye irritation, flush the exposures area with running water.

Remove any contaminated clothing, taking care not to contaminate eyes. If chemical is in eyes, open victim's eyes while under gentle running water. Use sufficient force to open eye lids. Have the victim "roll" eyes. As per standard industrial practice, the recommended minimum flushing time is 15 minutes.

The victim should seek immediate medical attention if an adverse reaction has occurred. A copy of label and SDS should be given to the physician or health professional. If chemical is swallowed, and the victim is having a reaction to the product, CALL PHYSICIAN OR POISON CONTROL CENTER FOR MOST CURRENT INFORMATION. If professional advice is not available, induce vomiting. Never induce vomiting or give diluents (milk or water) to someone who is unconscious, having convulsions, or who cannot swallow.

### Eye:

Flush with water in eyewash for at least 15 minutes, holding eyelids open. Remove contact lenses, clean before re-use. Obtain medical attention if symptoms develop (redness, itching, etc.)

### Skin:

Wash with plenty of soap and water for at least 15 minutes. Remove contaminated clothing, which may be washed for re-use. Obtain medical attention if symptoms develop (redness, itching, etc.).

### Inhalation:

Remove person to fresh air. Obtain medical attention unless effects are mild and temporary.

### Ingestion:

Give plenty of water, if conscious. If vomiting occurs naturally, wash out mouth. Be prepared to induce vomiting upon a physician's advice. Obtain medical attention if symptoms develop.

### Note to Physician:

Treat symptomatically. No specific antidote.

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## 5. Fire Fighting Measures

### Fire extinguishing media

This Product is not combustible. If this product is in the proximity of a fire, use fire extinguishing materials which are appropriate the materials which are involved in the fire, eg. powder, foam, CO<sub>2</sub> or water fog.

### Unsuitable extinguishing media

None known.

### Hazardous Combustion products

Includes carbon dioxide, carbon monoxide, and dense smoke.

### Advice for firefighters

Standard turnout gear ("bunker gear"). Positive pressure self-contained breathing apparatus. Prevent firefighting water from entering the environment.

## 6. Accidental release measures

### Personal Protective Equipment

Area ventilation is generally adequate. Chemical-resistant gloves should be worn. Wear standard safety goggles or glasses. All watertight materials and rubber materials offer adequate protection. Avoid contact with eyes and skin.

### Spill cleanup

Absorb spill. Common absorbent materials should be effective. Deposit in appropriate containers for removal and disposal. Wash area with plenty of water.

### Environmental precautions

Avoid discharge to lakes, streams, sewers, etc. Accidental releases may be subject to special reporting requirements and other regulatory mandates.

See also sections 8 and 13

## 7. Handling and storage

Storage of some materials is regulated by federal, state, and/or local laws.

### Precautions for safe handling

See section 8 on exposure controls /personal protection for information on personal protection. Avoid contact with eyes and skin. The product should be used under well-ventilated conditions. Keep closed or covered when not in use.

### Storage temperature

Large box: Store at room temperature

Small box: Frozen, at minus 20 degrees Celsius

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## Storage pressure

Ambient.

## Handling procedures

Keep closed or covered when not in use.

## Storage Procedures

Suitable for most general chemical storage areas. Protect from direct sunlight.

## Specific end uses

This product should only be used for applications described in section 1.

## 8. Exposure controls, personal protection

### Control parameters

#### Occupational exposure limits EH40 (Great Britain)

Contained in product constituents qPCR mix and additive for Lysis buffer E.

CAS-no:	Name	Limits	Comments
56-81-5	Glycerol, mist	10 mg/m <sup>3</sup> /8 hour TWA	-

DNEL/PNEC: -

### Exposure controls

#### Appropriate technical measures:

Well- functioning area ventilation is generally adequate. No respiratory protection will be needed under normal operating conditions.

#### General information/hygiene measures:

Smoking, consumption of food or liquid, and storage of tobacco, food or liquid, are not allowed in the workroom. Whenever you take a break in using this product and when you have finished using it, all exposed areas of the body must be washed. Always wash hands, forearms and face. Make sure that eyewash and emergency showers are clearly marked. Avoid contact with eyes and skin.

#### Personal Protective Equipments

Only CE marked personal protection equipment should be used. Chemical-resistant gloves should be worn (EN 374).

Wear standard safety goggles or glasses (EN 166). No respiratory protection is needed.

Wear appropriate protective clothing.

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## 9. Physical and chemical properties

### For all components of the kit

**Odor**

None

**Boiling point**

Not established

**Melting point or range**

Not established

**pH**

neutral

**Vapor pressure**

Not established but similar to water

**Specific gravity**

Not established

**Solubility in water**

Yes

**Vapor pressure, mm Hg at 20 degrees Celsius**

Not established

**Volatiles**

Not established

**Evaporation rate (water=1)**

Not established

**Viscosity**

Not established

**Appearance and color**

Colorless liquid

## 10. Stability and Reactivity

**Reactivity**

Stable under normal and recommended conditions.

**Chemical Stability**

Stable under recommended conditions for use and storage

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## Conditions to avoid

Any set of conditions, which should be avoided for water. Direct sunlight. Strong oxidizers and reducers. Strong acids and bases. Alkalimetals.

## Materials with which substance is incompatible

This product is not compatible with substances which are incompatible with water. Otherwise not established.

## Hazardous Decomposition Products

None known

## Hazardous reactions

Not expected to occur

## 11. Toxicological information

Only the buffer F component of the kit is classified and the information below is for that constituent.

### Potential Health Effect

No long-term health effect from exposure to this product is presently known.

### Specific target organ toxicity – single exposure

Not classified

### Acute toxicity

Not classified

### Serious eye damage/irritation

May cause moderate eye irritation

May cause moderate corneal injury

### Dermal/skin corrosion/irritation

Prolonged skin contact is unlikely to result in harmful amounts.

Typical for this family of materials.

LD50, Rabbit >2000 mg/kg Estimated

### Inhalation/respiratory

Not classified

### Oral/ingestion

Not classified

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## Aspiration hazard

Not classified

## Specific target organ toxicity – single exposure

Not classified

## Specific target organ toxicity – repeated exposure

Not classified

## Carcinogenicity

Not classified

## Reproductive toxicity

Not classified

## Additional information

May cause mild temporary irritation in eyes

## 12. Ecological Information

Only the Buffer F component of the kit is classified and the information below is for that constituent.

### Toxicity

Avoid leakage to sewage system or surface water. Constituent contained in product Buffer F

Toxicity to fish

For this family of materials:

Material is toxic to aquatic organisms (LC50 between 1 and 10 mg/l in the most sensitive species)

LC50, Pimephales promelas (fathead minnow), static test, 96 hour, 3.5-4.9 mg/l, OECD test Guideline 203 or equivalent

Toxicity to aquatic invertebrates

For this family of materials:

EC50, Daphnia magna (Water flea), 48 Hour, 3.1 mg/l, OECD Test Guideline 202 or equivalent

### Environmental Fate (Degradation, Transformation, and Persistence)

Biodegradability: For this family of materials: Material is readily biodegradable. Passes OECD test(s) for ready biodegradability.

10-day Window: Not applicable

Biodegradation: > 60 %

Exposure time: 28 d

Method: OECD Test Guideline 301F, B or equivalent



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## Bioaccumulative potential

No data

## Mobility in soil

No data

## Result of PBT and vPvB assessment

The product does not meet the criteria for PBT or vPvB

## Other adverse effects

None known

## 13. Disposal Considerations

### Waste treatment methods

Avoid discharge to drain and surface water Collect spills and waste in closed leak-proof containers for disposal at the local hazardous waste site. This product, when being disposed of in its unused and uncontaminated state should be treated as a hazardous waste according to EC Directive 2008/98/EC. Any disposal practices must be in compliance with all national and provincial laws and any municipal or local by-laws governing hazardous waste. For used, contaminated and residual materials additional evaluations may be required. Do not dump into any sewers, on the ground, or into any body of water.

### EWC-code

15 02 02 absorbents, filter materials (including oil filters not otherwise specified), wiping cloths, protective clothing contaminated by dangerous substances.

## 14. Transport information

**This product is not subject to transport regulations**

### UN Proper shipping name

Not determined

### UN number

Not determined

### Transport Hazard class

Not determined

### Environmental hazards - MP

Not determined

### ID number

Not determined

**Special precautions for the user:** Not applicable

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Transport in bulk according to Annex II of MARPOL 73/78 and IBC code: Not applicable

## 15. Regulatory information

### European Union.

Pressure Equipment (Amendment) Regulations 2011. Chemicals (Hazard Information and Packaging for Supply) Regulations 2009. Control of Substances Hazardous to Health Regulations 2002 (as amended). Merchant Shipping (Dangerous Goods and Marine Pollutants) Regulations 1997. Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 1995 (as amended). Personal Protective Equipment Regulations 2002. Personal Protective Equipment at Work Regulations 1992. Hazardous Waste (England and Wales) Regulations 2005(as amended). EC regulation 19s07/2006 (REACH) Directive 2000/532/EC. Seveso directive: 96/82/EC. EU 453/2010.

### Other countries

Not determined.

## 16: Other information

### Full test of H-phrases as mentioned in section 3 for constituent of buffer F

H318 Causes serious eye damage

H412 Harmful to aquatic life with long-lasting effects

The above information was acquired by diligent search and/or investigation and the recommendations are based on prudent application of professional judgment. The information shall not be taken as being all inclusive and is to be used only as a guide. All materials and mixtures may present unknown hazards and should be used with caution. Since DNA Diagnostic A/S cannot control the actual methods, volumes, or conditions of use, the Company shall not be held liable for any damages or losses resulting from the handling or from contact with the product as described herein. THE INFORMATION IN THIS SDS DOES NOT CONSTITUTE A WARRANTY, EXPRESS OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE.