

# MATERIAL SAFETY DATA SHEET

## Effluent (Samples & Spillage).

### 1. Substance Name:

**Site Effluent.**  
**Samples from Low Level Liquid Effluent Treatment Plant.**

Stores Code: N/A

Health Hazard Group(s): A, S.

#### Supplier(s)

N/A – not for supply, prepared & analysed solely in-house by:

DSRL

Dounreay

Thurso

Caithness

Tel. No.: 01847 802917

Emergency Tel. No.: x 333 (ambulance), x 2187 (Occupational health dept.) & x 3210 (Shift manager).

#### Component(s):

100 % water, has a very small risk of being contaminated with biological pathogens, e.g. sewage borne pathogens -bacteria such as Streptococci ,Erescheria coli, Salmonellosis, Clostirdium tetani.

Also possible presence of pathogens such as hepatitis A, enteroviruses, leptospirosis (caused by a parasitic worm), and zoonotic parasites such as giardia and cryptosporidium .

### 2. Hazard Class(es) including CHIP:

Biohazard

Signal Word: Warning



Hazard Statements:

H303 -May be harmful if swallowed.

H313: May be harmful in contact with skin .

H316: Causes mild skin irritation .

Precautionary Statements:

P202: Do not handle until all safety precautions have been read and understood .

P261: Avoid breathing mist/ spray.

P272: Contaminated work clothing should not be allowed out of the workplace.

P281: Use personal protective equipment as required.

See also the Precautionary Statements in Sections 4 & 7 (First Aid & Handling/Storage).

### 3. Methods of Entering Body and Effect:

**Ingestion:**

By gastro-enteric route if good hygiene practises not being observed.

**Inhalation:**

Possible route through oral/nasal inhalation.

Can cause infection through inhalation as an aerosol

**Eye Contact:**

Possible contact with eyes which may possibly cause irritation.

**Skin:**

- If skin is contaminated with organic material & not washed, there is potential for skin irritation or a route (via ingestion) into the body.

- Absorption through intact skin is unlikely.

- Organisms may enter via minor skin abrasions or cuts/wounds.

Effects:

Food poisoning type illness- gastroenteric upset are most common result of ingestion (direct or indirect) or inhalation.

**Is the substance an R42, R42/43, R45, R46 or R49? NO.**

### 4. First Aid Measures:

**DO:**

**Composite:**

Obtain medical attention (OHD x2187 or Ambulance x333) if any reaction occurs due to contact with skin, eyes or through inhalation, ingestion.

Ensure First Aiders /Rescue Personnel avoid exposure and wear appropriate Personal Protective Equipment (PPE).

**Eyes:** If eye contact occurs immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid immediately.

**Ingestion:** If ingested and if victim is conscious and alert, rinse out mouth & spit out rinses. Get medical aid if adverse effects occur.

**Inhalation:** If inhaled remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid if cough or other symptoms appear.

**Skin:** Wash thoroughly with biocidal soap and water whilst removing contaminated clothing and shoes. Any cut or abrasion sustained or contaminated with effluent water must be treated by medical staff.

**DO NOT:**

**Eyes:**

Obtain Medical Attention.

**Ingestion:**

DO NOT induce vomiting.  
Never give anything by mouth to an unconscious person.

**Advice to Medical Staff:**

**Skin exposure:**

P350: Gently wash with **biocidal** soap and water (GHS)

P306: IF ON CLOTHING-remove clothing & launder before re-use. (GHS)

**Eye Contact Symptoms:**

.  
Rinse with flowing water or eyewash solution.  
Action:  
P338: Remove contact lenses if present and easy to do.  
Continue rinsing. (GHS)

**Ingestion Symptoms:**

Action:  
Immediate First Aid.

**Inhalation Symptoms:**

There will be a feeling of tightness in the chest with shortness of breath, a cough and a sore throat. In severe cases congestion of the lungs can occur causing severe shortness of breath followed by unconsciousness.

**5. Fire Fighting Measures:**

Fire Action:

Sound Alarm - Call Fire Brigade (ext. 333) .  
Give details of fire and location .  
If safe to do so tackle fire with appropriate Extinguishers supplied for Area .  
Report to your Fire Evacuation Assembly Point.  
Substance / Material Non Combustible.

Wear Full Protective Clothing with Breathing Apparatus- Fire Brigade Only.

## 6. Spillage Procedures :

For Spillage and/or Fire ensure that appropriate personal protective equipment/clothing is worn.

Spillage:

Wear a face shield when dealing with spill outwith a fumecupboard.

Cover spill with absorbent material- such as tissue paper.Allow time for the spill to be absorbed.

Avoid creating any mist/spray or any splashes.

Take care when broken glass is involved –use forceps to pick up not gloved hands.

Collect all spill materials, including gloves worn & place in biohazard bag.

Wash spill site with disinfectant- e.g. dilute bleach solution.

## 7. Handling and Storage Procedures:

See Section 8 Exposure Controls for list of suitable Personal Protective Equipment for handling substance.

Store in accordance with Local Procedures /House Rules.

If decanting is necessary, ensure containers are labelled appropriately.

Handling:

Do not breathe dust, vapour, mist, or gas.

Do not get in eyes, on skin, or on clothing.

Incompatible materials, exposure to moist air or water, temperatures above 300°C.

P233: Keep container tightly closed (GHS)

P234: Keep only in original container (GHS)

P261: Avoid breathing dust/fume/gas/mist/vapours/spray (GHS)

P262: Do not get in eyes, on skin, or on clothing (GHS)

P264: Wash hands thoroughly with biocidal soap & water after handling(GHS)

Storage:

Store in a cool, dry place. Store in a tightly closed container.

## 8. Exposure Limits (EH40):

Composition/Component –100 % effluent from LLETP (No assigned exposure limit).

Usually free from any sewage but potentially possible if site drain contaminates groundwater table or finds other route into effluent treatment plant.

**Protective Equipment:**

Ensure Adequate Ventilation  
Eyewash Bottle  
Fumecupboard (FC)  
Coveralls  
PVC or Rubber Gloves.  
Safety Spectacles with side shields.  
Full face visor (spills outwith FC ONLY)  
Skin washing facilities.  
Biocidal hand soap.

**9. Physical and Chemical Properties:**

Physical State: liquid  
Colour: clear  
Odour: odourless  
Decomposition Temperature: unknown.  
Solubility in water: Soluble

**10. Stability and Reactivity:**

Chemical Stability: Stable.  
Hazardous Decomposition Products: not known.  
Hazardous Polymerization will not occur.

**11. Toxicological Information:**

No data available.

**12. Ecological Information:**

No data available.

**13. Disposal Procedures:**

Dispose of in accordance with local regulation and house rules.

**14. Transport Information:**

Not applicable- samples are disposed of on Site.

**15. Regulatory Information:**

None available.

**16. Other Relevant Information:**

Hazard Symbols:



Health hazard- Biohazard

Risk Phrases:

CHIP:

Safety Phrases:

S 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

GHS:

Precautionary statements

- P302: IF ON SKIN:
- P352: Wash with soap and water

Hazard Phrases

GHS:

- H303: May be harmful if swallowed.