Material Safety Data Sheet

According to 91/155/EC

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

1.1 Product identifiers

Product name : Gram differentiator

Product code: S1075

REACH No. : A registration number is not available for this substance as the substance or its uses are exempted from registration, the annual tonnage does not require a registration or the registration is envisaged for a later registration deadline.

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

Identified uses : Laboratory chemicals, Manufacture of substances

1.3 Details of the supplier of the safety data sheet

Gainland Chemical Company Factory road Sandycroft Deeside Flintshire CH5 2QJ UNITED KINGDOM +44 (0)1244 536326 gainland@btconnect.com

1.4 Emergency telephone number

+44 (0)1244 536326

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

Flam. Liq. 2: H225; STOT SE 2: H371; Acute Tox. 4: H302

2.2 Label elements

Pictogram



Signal word	Danger		
Hazard statements(s)			
H225	Highly flammable liquid and vapour.		
H302	Harmful if swallowed.		
H371	May cause damage to organs.		

Precautionary statement(s)

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P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P260	Do not breathe fumes/gas/mist/vapours/spray.
P264	Wash hands thoroughly after handling.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P309+311	IF exposed or if you feel unwell: Call a POISON CENTER or doctor.

2.3 Other hazards - In use, may form flammable / explosive vapour-air mixture.

SECTION 3: Composition/information on ingredients

3.1 Substances

Product details: >50% ethanol containing < 3% mineral acid

Ethanol

EINECS 200-578-6	CAS 64-17-5	CHIP Classification Substance with a Community workplace exposure limit.	CLP Classification Flam. Liq. 2: H225	Percentage >90%
Methanol				
EINECS 200-659-6	CAS 67-56-1	CHIP Classification	CLP Classification Flam. Liq. 2: H225; Acute Tox. 3: H331; Acute Tox. 3: H311; Acute Tox. 3: H301; STOT SE 1: H370	Percentage 1-10%
Hydrochloric acid				
EINECS 231-595-7	CAS 67-56-1	CHIP Classification	CLP Classification Skin Corr. 1B: H314; STOT SE 3: H335	Percentage 1-10%

SECTION 4: First aid measures

4.1 Description of first aid measures

If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a doctor.

In case of skin contact

Remove all contaminated clothes and footwear immediately unless stuck to skin. Wash immediately with plenty of soap and water. Consult a doctor.

In case of eye contact

Immediately flush with plenty of water for up to 15 minutes. Remove any contact lenses and open eyes wide apart. Get medical attention immediately. Continue to rinse.

If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water.

4.2 Most important symptoms and effects, both acute and delayed

Skin contact

May be harmful if absorbed through the skin. Irritation or pain may occur at the site of contact. There may be redness or whiteness of the skin in the area of exposure. An itchy rash may occur at the site of contact. Blistering may occur.

Eye contact

There may be pain and redness. The eyes may water profusely. The vision may become blurred. Corneal burns may occur.

Ingestion

Toxic if swallowed. There may be soreness and redness of the mouth and throat. There may be difficulty swallowing. Corrosive burns may appear around the lips. Nausea and stomach pain may occur. There may be vomiting.

Inhalation

May be harmful if inhaled. May cause respiratory tract irritation. There may be irritation of the throat with a feeling of tightness in the chest. May cause drowsiness and dizziness. Exposure may cause coughing or wheezing.

Delayed / immediate effects

Immediate effects can be expected after short-term exposure.

4.3 Indication of any immediate medical attention and special treatment needed

Immediate / special treatment

Show this safety data sheet to the doctor in attendance. Eye bathing equipment should be available on the premises.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2 Special hazards arising from the substance or mixture

Highly flammable. In combustion emits toxic fumes. Forms explosive air-vapour mixture. Vapour may travel considerable distance to source of ignition and flash back.

5.3 Advice for firefighters

Wear self-contained breathing apparatus. Wear protective clothing to prevent contact with skin and eyes. Use water spray to cool unopened containers.

5.4 Further information

no data available

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Eliminate all sources of ignition. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas. Refer to section 8 of SDS for personal protection details.

6.2 Environmental precautions

no data available

6.3 Methods and materials for containment and cleaning up

Mop up with cloth and rinse with tap water to public sewer. Ensure adequate ventilation.

6.4 Reference to other sections

For disposal see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Avoid direct contact with the substance. Ensure there is sufficient ventilation of the area. Avoid breathing vapours, mist or gas. Do not handle in a confined space. Keep away from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge. For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities

Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Keep away from sources of ignition. Prevent the build up of electrostatic charge in the immediate area. Ensure lighting and electrical equipment are not a source of ignition.

7.3 Specific end use(s)

No other specific uses stipulated other than the uses mentioned in section 1.2.

SECTION 8: Exposure control/personal protection

8.1 Control parameters

Components with workplace control parameters

Ethanol

Workplace exp	oosure limits		Respirable dust	
State	8 hour TWA	15 min. STEL	8 hour TWA	15 min. STEL
UK	1920 mg/m3	_	_	_
Methanol				
Workplace exp	oosure limits		Respirable dust	
State	8 hour TWA	15 min. STEL	8 hour TWA	15 min. STEL
UK	266 mg/m3	333 mg/m3	_	-
Hydrochloric ad	cid			
Workplace exp	oosure limits		Respirable dust	
State	8 hour TWA	15 min. STEL	8 hour TWA	15 min. STEL

8 mg/m3

8.2 Exposure controls

UK

Appropriate engineering controls General industrial hygiene practice.

8 mg/m3

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Personal protective equipment

Eye/face protection

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Body Protection

Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place., The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator

is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

a) Appearance	Form: clear liquid
b) Odour	Alcoholic
c) Odour Threshold	No data available
d) pH	No data available
e) Melting point/freezing point	No data available
f) Initial boiling point and boiling range	No data available
g) Flash point	16°C
h) Evaporation rate	No data available
i) Flammability (solid, gas)	No data available
j) Upper/lower flammability or explosive limits	No data available
k) Vapour pressure	No data available
I) Vapour density	No data available
m) Relative density	No data available
n) Water solubility	Soluble
o) Partition coefficient: n-ocatonol/water	No data available
p) Auto-ignition temperature	No data available
q) Decomposition temperature	No data available
r) Viscosity	No data available
s) Explosive properties	No data available
t) Oxidizing properties	No data available

9.2 Other safety information

no data available

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity

Stable under recommended transport or storage conditions.

10.2 Chemical stability

Stable under normal conditions. Stable at room temperature.

10.3 Possibility of hazardous reactions

Hazardous reactions will not occur under normal transport or storage conditions.

10.4 Conditions to avoid

Heat. Hot surfaces. Sources of ignition. Flames.

10.5 Incompatible materials

Strong oxidising agents. Alkali metals. Peroxides.

10.6 Hazardous decomposition products

Other decomposition products - no data available

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SECTION 11: Toxicological information

11.1 Information on toxicological effects

Ethanol

IVN	RAT	LD50	1440	mg/kg
ORL	MUS	LD50	3450	mg/kg
ORL	RAT	LD50	7060	mg/kg

Toxicity values: No data available.

Acute toxicity no data available

Skin corrosion/irritation no data available

Serious eye damage/eye irritation no data available

Respiratory or skin sensitization no data available

Germ cell mutagenicity no data available

Carcinogenicity no data available

Reproductive toxicity no data available

Specific target organ toxicity - single exposure no data available

Specific target organ toxicity - repeated exposure no data available

Aspiration hazard no data available

Potential health effects

Inhalation

May be harmful if inhaled. May cause respiratory tract irritation. There may be irritation of the throat with a feeling of tightness in the chest. May cause drowsiness and dizziness. Exposure may cause coughing or wheezing.

Ingestion

Toxic if swallowed. There may be soreness and redness of the mouth and throat. There may be difficulty swallowing. Corrosive burns may appear around the lips. Nausea and stomach pain may occur. There may be vomiting.

Skin

May be harmful if absorbed through the skin. Irritation or pain may occur at the site of contact. There may be redness or whiteness of the skin in the area of exposure. An itchy rash may occur at the site of contact. Blistering may occur.

Eyes

There may be pain and redness. The eyes may water profusely. The vision may become blurred. Corneal burns may occur.

Signs and Symptoms of Exposure

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Additional Information

none

SECTION 12: Ecological information

12.1 Toxicity

no data available

12.2 Persistence and degradability

no data available

12.3 Bioaccumulative potential

no data available

12.4 Mobility in soil

Soluble in water.

12.5 Results of PBT and vPvB assessment

This product is not identified as a PBT/vPvB substance.

12.6 Other adverse effects

no data available

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product Dispose of waste reagents to public sewer, diluting greatly with water.

Contaminated packaging

Rinse and treat as general waste.

NB: The user's attention is drawn to the possible existence of regional or national regulations regarding disposal.

SECTION 14: Transport information

14.1 UN number

UN number: UN1170

14.2 UN proper shipping name

Shipping name: ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)

14.3 Transport hazard class(es)

ADR/RID: 3

14.4 Packaging group

ADR/RID: 2

14.5 Environmental hazards

ADR/RID: no

14.6 Special precautions for user

no data available

SECTION 15: Regulatory information

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

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

no data available