

**Section 1. Identification****1.1 Product Identifier** 1470

Product Name THIOUREA pure

CAS Number 62-56-6

REACH Registration No A registration number is not available as the substance or its uses are exempt, the annual tonnage does not require a registration or the registration is envisaged for a later date.

Molecular Formula  $\text{NH}_2\text{CSNH}_2 = 76.12$ **1.2 Relevant identified uses of the substance or mixture & uses advised against**

Uses of Material Chemical for industrial and laboratory use. Not suitable for domestic use.

**1.3 Supplier** Vickers Laboratories LtdGrangefield Industrial Estate  
Richardshaw Road  
Pudsey  
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LS28 6QW  
UNITED KINGDOMPhone 44 0113 2362811  
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Website [www.viclabs.co.uk](http://www.viclabs.co.uk)**1.4 Emergency Telephone** (08:00-16:30) +44(0) 113 2362811  
(24hr) 112  
(Have this document to hand)**Section 2. Hazards Identification****2.1 Classification of the substance or mixture****Classification according to regulation 1272/2008/EC**

Acute toxicity, category 4 (oral)

Carcinogenicity, category 2

Reproductive toxicity, category 2

Hazard to aquatic environment, category 2

H302: Harmful if swallowed.

H351: Suspected of causing cancer.

H361: Suspected of damaging fertility or the unborn child.

H411: Toxic to aquatic life with long lasting effects.

**2.2 Label elements****Labelling according to regulation 1272/2008/EC**

Signal word Warning

Hazard Pictograms



**Hazard Statements** Suspected of causing cancer. Suspected of damaging fertility or the unborn child. Harmful if swallowed. Toxic to aquatic life with long lasting effects.

**Precautionary Statements** Obtain special instructions before use. Avoid release to the environment. Wear protective gloves / protective clothing / eye protection / face protection. IF exposed or concerned: Get medical advice/attention. IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.

## Section 3. Composition

### 3.1 Substances

Component	CAS No.	EEC No.	REACH No.	Conc w/w	CLP Classification (1272/2008/CE)
Thiourea	62-56-6	200-543-5		99%	Acute Tox. 4 (O),Carc. 2,Repr. 2,Aquatic Chronic 2

## Section 4. First Aid

### 4.1 Description of first aid measures

Eyes	Irrigate thoroughly with plenty of water for at least 10 minutes, holding the eye open. If discomfort persists OBTAIN MEDICAL ATTENTION.
Skin	Wash off skin thoroughly with water. If discomfort persists OBTAIN MEDICAL ATTENTION.
Inhalation	Remove from exposure.
Ingestion	Wash out the patients mouth thoroughly with water. OBTAIN MEDICAL ATTENTION.
Personal protection for first aiders	Wear protective gloves / eye protection.

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

No further relevant information available.

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

No further relevant information available.

## Section 5. Fire Fighting

### 5.1 Extinguishing media

Extinguishing Media	Water spray.
Unsuitable Media	Nothing specified.

### 5.2 Special hazards arising from the substance or mixture

Hazards	May evolve toxic fumes if involved in a fire.
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### 5.3 Advice for firefighters

Advice for firefighters	Evacuate area immediately. Keep up wind. Avoid exposure to toxic vapours and fumes. Fire-fighters should wear protective clothing and breathing apparatus.
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## Section 6. Accidental Release Measures

### 6.1 Personal precautions, protective equipment and emergency procedures

Personal Protection	Avoid breathing dust. Use approved personal protective equipment. Evacuate area immediately. Do not allow general use of area until it is safe to do so.
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### 6.2 Environmental precautions

Environmental

Notify the Environmental Agency and local Environmental Health Officer if major spillage occurs.

### 6.3 Methods and material for containment and cleaning up

Major Spillage                      Shovel/sweep up into container for removal Wash area down with copious amounts of water.  
Minor Spillage                      Wash area down with copious amounts of water.

### 6.4 Reference to other sections

See section 8.2 for information on protective equipment and section 13 for information on disposal.

## Section 7. Storage & Handling

### 7.1 Precautions for safe handling

Avoid contact with skin and eyes. Do not breath dust. Do not allow to contaminate clothing.  
Ensure Local Exhaust Ventilation maintains dust concentrations to a minimum.

### 7.2 Conditions for safe storage, including any incompatibilities

Well ventilated, cool, dry storage .

### 7.3 Specific end use(s)

See section 1.2.

## Section 8. Workplace Exposure & Personal Protection

### 8.1 Control parameters

Component	CAS No	Concentration	Workplace Exposure Limits			
			Long Term (8hr TWA)		Short Term 15min period	
Thiourea	62-56-6	99%	-	-	-	-

Exposure data source(s)      No occupational exposure data currently available.

### 8.2 Exposure controls

Respiratory Protection          If process creates significant amounts of dust use L.E.V. or wear suitable dust mask.  
Hand Protection                  Wear gloves.  
Eye Protection                    Use tightly fitting chemical splash proof glasses or goggles.  
Skin Protection                    Avoid contact with skin. If skin contact or contamination of clothing is likely, protective clothing must be worn.  
Special Hazards                    No special precautions required.

## Section 9. Physical & Chemical Properties

### 9.1 Information on basic physical and chemical properties

Appearance                      White crystalline solid.  
Odour                                No specific odour.  
pH                                      7 @ 20°C solution.  
Boiling Point                      Not available  
Melting Point                      176 °C  
Flash Point                        Not applicable  
Upper Flammable Limit          Not applicable  
Lower Flammable Limit          Not applicable  
Auto Ignition                      Not applicable  
Explosive Properties              No.  
Oxidising Properties              No.  
Vapour Pressure                  Not applicable  
Relative Density                  1.4050  
Water Solubility                  137 g/l @ 20 °C

### 9.2 Other information

No data available.

## Section 10. Stability & Reactivity

10.1	Reactivity	No data available.
10.2	Chemical Stability	Stable under normal conditions
10.3	Possibility of hazardous reactions	No data available.
10.4	Conditions to Avoid	Excessive heating.
10.5	Incompatible Materials	Strong oxidising agents.
10.6	Hazardous Decomposition Products	Decomposes to evolve highly toxic fumes of oxides of nitrogen and sulphur.

## Section 11. Toxicological Information

### 11.1 Information on toxicological effects

Eyes	Contact with the solid or dust may be irritating to the eyes.
Skin	Unlikely to be an irritant on brief or occasional exposure.
LD50 Skin	>2800mg/kg Rabbit
Ingestion	Harmful if swallowed.
LD50 Oral	1750mg/kg Rat
Inhalation	Inhalation of dust will produce irritation of the eyes, nose, throat and respiratory tract.
LD50 Inhalation	Not available
TCLo	Not available
Carcinogenicity	Suspected of causing cancer.
Mutagenicity	Not considered to be a mutagen.
Reproductive Effects	Suspected of damaging fertility or the unborn child.

## Section 12. Ecological

12.1	Toxicity	Toxic to aquatic organisms. May cause long term adverse effects in the aquatic environment.
	LC50 Algal	6.8mg/l Green algae (96 hours)
	LC50 Crustacea	5.6 - 18mg/l Daphnia magna (48 hours)
	LC50 Fish	10mg/l Fish (96 hours)
12.2	Persistence and degradability	No data available.
12.3	Bioaccumulative potential	No data available.
12.4	Mobility in soil	No data available.
12.5	Results of PBT & vPvB assessment	Assessment not required.
12.6	Other adverse effects	None known at present.

## Section 13. Disposal Considerations

### 13.1 Waste treatment methods

Disposal Methods	Dispose of via an authorised waste disposal contractor to an approved waste disposal site, observing all local and national regulations.
Contaminated Packaging	Wash out containers with water. Use a licensed waste disposer.

## Section 14. Transport Information

<b>14.1 UN Number</b>	2811
<b>14.2 Proper Shipping Name</b>	Toxic solid, organic, N.O.S. (Thiourea)
<b>14.3 Transport classes</b>	
UN classification	6.1
Subsidiary hazard(s)	None
Transport category	2
ADR Hazard ID	60
Tunnel Restriction Code	E
<b>14.4 Packing Group</b>	III
<b>14.5 Environment hazards</b>	See section 12.
<b>14.6 Special precautions for user</b>	No special precautions required.
<b>14.7 Transport in bulk</b>	Not transported in bulk.



## Section 15. Regulatory Information

### 15.1 Safety, health and environment regulations specific for substance/mixture.

#### Classification, Labeling & Packaging of Substances & Mixtures Regulations (1272/2008/CE)

Classification Acute toxicity, category 4 (oral); Carcinogenicity, category 2; Reproductive toxicity, category 2; Hazard to aquatic environment, category 2

Signal word Warning

Hazard Pictograms



Hazard Statements H351, H361, H302, H411  
Suspected of causing cancer. Suspected of damaging fertility or the unborn child. Harmful if swallowed. Toxic to aquatic life with long lasting effects.

Precautionary Statements P201, P273, P280, P308+P313, P301+P312  
Obtain special instructions before use. Avoid release to the environment. Wear protective gloves / protective clothing / eye protection / face protection. IF exposed or concerned: Get medical advice/attention. IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.

### 15.2 Chemical safety assessment

Assessment not required.

## Section 16. Other Information

The information contained in this document only covers the hazards presented by this material, it DOES NOT constitute a workplace risk assessment. See sections 11 for toxicological information and section 12 for ecological information.

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