

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

#### 1.1. Product identifier

Product form : Substance  
Trade name : CYCLOPHOSPHAMIDE CRS  
CAS No : 6055-19-2  
Product code : C3250000  
Other means of identification : RTECS No : RP6157750

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

##### 1.2.1. Relevant identified uses

Main use category : The product is intended for research, analysis and scientific education.  
Use of the substance/mixture : For professional use only  
Function or use category : Laboratory chemicals

##### 1.2.2. Uses advised against

No additional information available

#### 1.3. Details of the supplier of the safety data sheet

European Directorate for the Quality of Medicines & Healthcare  
EDQM, Council of Europe  
67081 Strasbourg - France  
T +33(0)388412035 - F +33(0)388412771  
[www.edqm.eu](http://www.edqm.eu)

#### 1.4. Emergency telephone number

Emergency number : +44(0)1235239670

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

##### Classification according to Regulation (EC) No. 1272/2008 [CLP]

Carc. 1B H350  
Muta. 1B H340  
Repr. 1B H360D  
Acute Tox. 3 (Oral) H301

Full text of H-phrases: see section 16

##### Classification according to Directive 67/548/EEC or 1999/45/EC

Carc.Cat.2; R45  
Muta.Cat.2; R46  
Repr.Cat.2; R61  
T; R25

Full text of R-phrases: see section 16

##### Adverse physicochemical, human health and environmental effects

No additional information available

#### 2.2. Label elements

##### Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :



GHS06

GHS08

Signal word (CLP) :

Danger

Hazard statements (CLP) :

H301 - Toxic if swallowed  
H340 - May cause genetic defects  
H350 - May cause cancer  
H360D - May damage the unborn child

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## Safety Data Sheet

Safety Data Sheet in accordance with Regulation (EC) No. 1907/2006, as amended.

Precautionary statements (CLP) : P201 - Obtain special instructions before use  
P202 - Do not handle until all safety precautions have been read and understood  
P264 - Wash hands and other exposed areas thoroughly after handling  
P281 - Use personal protective equipment as required  
P301 + P310 - IF SWALLOWED: immediately call a POISON CENTER or doctor/physician  
P308 + P313 - IF exposed or concerned: Get medical advice/attention  
P330 - Rinse mouth  
P501 - Dispose of contents/container to : Hazardous waste. Comply with applicable regulations

### 2.3. Other hazards

Other hazards not contributing to the classification : Exposure may produce an allergic reaction.

## SECTION 3: Composition/information on ingredients

### 3.1. Substance

Name : CYCLOPHOSPHAMIDE  
CAS No : 6055-19-2

Name	Product identifier	%	Classification according to Directive 67/548/EEC
CYCLOPHOSPHAMIDE (Main constituent)	(CAS No) 6055-19-2	≤ 100	Carc.Cat.2; R45 Muta.Cat.2; R46 Repr.Cat.2; R61 T; R25

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
CYCLOPHOSPHAMIDE (Main constituent)	(CAS No) 6055-19-2	≤ 100	Carc. 1B, H350 Muta. 1B, H340 Repr. 1B, H360D Acute Tox. 3 (Oral), H301

Full text of R- and H-phrases: see section 16

### 3.2. Mixture

Not applicable

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

First-aid measures general : If you feel unwell, seek medical advice (show the label where possible). Delayed adverse effects possible. Active component. Pharmaceuticals. For further information refer to Summary of Product Characteristics.

First-aid measures after inhalation : Move to fresh air in case of accidental inhalation. Assure fresh air breathing. Obtain medical attention if breathing difficulty persists.

First-aid measures after skin contact : Rinse skin with water/shower. Wash with plenty of soap and water.

First-aid measures after eye contact : Rinse with water while holding the eyes wide open. Contact lenses should be removed. Obtain medical attention if pain, blinking or redness persist.

First-aid measures after ingestion : Rinse mouth out with water. The following symptoms may occur: (see section(s) : 2, 4.2). If you feel unwell, seek medical advice. Prolonged medical observation may be indicated. (see section(s) : 4.3). The affected person must rest and be kept under medical observation.

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

Symptoms/injuries : See Heading 2. Immune system disorders. Blood and lymphatic system disorders. Neoplasms benign, malignant and unspecified (incl cysts and polyps). nausea, vomiting.

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

In all cases of doubt, or when symptoms persist, seek medical attention. If possible show this sheet, if not available show packaging or label. If the occupational exposure limit is exceeded : Specific medical surveillance.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

Suitable extinguishing media : Small amounts: Use extinguishing media appropriate for surrounding fire. Water spray. Carbon dioxide. Dry powder. Foam. Large amounts: Not applicable.

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

Reactivity in case of fire : See Heading 10.1.

### 5.3. Advice for firefighters

Precautionary measures fire : Small amounts: Use normal individual fire protective equipment. Large amounts: Not applicable.  
Firefighting instructions : Dilute with water.

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### SECTION 6: Accidental release measures

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

General measures : Avoid raising dust. Wear suitable protective clothing, gloves and eye or face protection. Avoid any direct contact with the product. Evacuate unnecessary personnel. Large amounts: Not applicable.

##### 6.1.1. For non-emergency personnel

Protective equipment : See Headings 7 and 8.

Emergency procedures : Spill should be handled by trained cleaning personnel properly equipped with respiratory and eye protection. Wear suitable protective clothing and gloves.

##### 6.1.2. For emergency responders

No additional information available

#### 6.2. Environmental precautions

No additional information available

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

Methods for cleaning up : Sweep spilled substance into containers; if appropriate, moisten first to prevent dusting. Ensure waste is collected and contained. Clean thoroughly. Clean with water. Collect all waste in suitable and labelled containers and dispose according to local legislation. Wash the non-recoverable remainder with : Sodium hypochlorite solution.

#### 6.4. Reference to other sections

(see section(s) : 8, 13).

### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

Additional hazards when processed : Small amounts: See Heading 1. When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us. The attention of the user is drawn to the risks possibly incurred by using the product for any other purpose than that for which it was intended. Avoid contact during pregnancy/while nursing.

Precautions for safe handling : Handle and open container with care. See Heading 8. Do not handle until all safety precautions have been read and understood. Avoid any direct contact with the product. Obtain special instructions before use.

Hygiene measures : Handle in accordance with good industrial hygiene and safety procedures. Small amounts: Material should be handled in a laboratory hood whenever possible.

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

Technical measures : Comply with applicable regulations.

Storage conditions : To guarantee the quality and properties of the product, keep : dry, Keep in a cool, well-ventilated place away from heat. Store in original container. Store according to local legislation.

Incompatible products : Strong oxidizing agents.

#### 7.3. Specific end use(s)

See Heading 1.

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

No additional information available

#### 8.2. Exposure controls

Appropriate engineering controls : Material should be handled in a laboratory hood whenever possible.

Personal protective equipment : Gloves. Safety glasses. Protective clothing. Dust production: dust mask with filter type P3.



Hand protection : Gloves. Chemical resistant PVC gloves (to European standard EN 374 or equivalent).

Eye protection : Wear eye protection. DIN EN 166.

Skin and body protection : Lab coat. Wear suitable protective clothing. DIN EN 13034.

Respiratory protection : Quarter mask (DIN EN 140). Wear appropriate breathing apparatus if air renewal not sufficient to maintain dust/vapour under TLV.

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### SECTION 9: Physical and chemical properties

#### 9.1. Information on basic physical and chemical properties

Physical state	: Solid
Appearance	: Crystalline powder. white. Powder.
Colour	: No data available
Odour	: Not applicable. See Heading 2, 4.2, 8.
Odour threshold	: No data available
pH	: 4 - 6 (2%)
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: 49 - 53 °C
Freezing point	: No data available
Boiling point	: 336 °C
Flash point	: 113 °C
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: No data available
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Solubility	: Alcohol. Water: > 100 mg/l
Log Pow	: 0,6 at 20°C
Log Kow	: 0,63
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: No data available

#### 9.2. Other information

No additional information available

### SECTION 10: Stability and reactivity

#### 10.1. Reactivity

Stable under normal conditions.

#### 10.2. Chemical stability

No additional information available

#### 10.3. Possibility of hazardous reactions

Small amounts: When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us. Large amounts: Not applicable.

#### 10.4. Conditions to avoid

No additional information available

#### 10.5. Incompatible materials

Small amounts: None under normal use. Large amounts: Not applicable.

#### 10.6. Hazardous decomposition products

When heated to decomposition, emits dangerous fumes. Large amounts: Not applicable.

### SECTION 11: Toxicological information

#### 11.1. Information on toxicological effects

Acute toxicity : Toxic if swallowed.

#### CYCLOPHOSPHAMIDE CRS (6055-19-2)

LD50 oral rat	94 mg/kg
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Skin corrosion/irritation	: Not classified pH: 4 - 6 (2%)
Serious eye damage/irritation	: Not classified pH: 4 - 6 (2%)
Respiratory or skin sensitisation	: Not classified

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Germ cell mutagenicity	: May cause genetic defects.
Carcinogenicity	: May cause cancer.
Reproductive toxicity	: May damage the unborn child.
Specific target organ toxicity (single exposure)	: Not classified
Specific target organ toxicity (repeated exposure)	: Not classified
Aspiration hazard	: Not classified
Potential adverse human health effects and symptoms	: Avoid any direct contact with the product. Small amounts: When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us. See first aid section of this material safety data sheet. Large amounts: Not applicable.

### SECTION 12: Ecological information

#### 12.1. Toxicity

Ecology - general	: Small amounts: See Heading 2. Hazardous waste. Use suitable disposal containers. Large amounts: Not applicable.
Ecology - water	: Soluble in water.

#### 12.2. Persistence and degradability

No additional information available

#### 12.3. Bioaccumulative potential

CYCLOPHOSPHAMIDE CRS (6055-19-2)	
Log Pow	0,6 at 20°C
Log Kow	0,63
Bioaccumulative potential	Weak.

#### 12.4. Mobility in soil

No additional information available

#### 12.5. Results of PBT and vPvB assessment

No additional information available

#### 12.6. Other adverse effects

No additional information available

### SECTION 13: Disposal considerations

#### 13.1. Waste treatment methods

Regional legislation (waste)	: Dispose in a safe manner in accordance with local/national regulations.
Waste disposal recommendations	: Do not empty into drains, dispose of this material and its container at hazardous or special waste collection point.

### SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

#### 14.1. UN number

UN-No. (ADR)	: 3464
UN-No. (IMDG)	: 3464
UN-No.(IATA)	: 3464
UN-No.(ADN)	: Not applicable
UN-No. (RID)	: 3464

#### 14.2. UN proper shipping name

Proper Shipping Name (ADR)	: ORGANOPHOSPHORUS COMPOUND, TOXIC, SOLID, N.O.S.
Proper Shipping Name (IMDG)	: Not applicable
Proper Shipping Name (IATA)	: Not applicable
Proper Shipping Name (ADN)	: Not applicable
Proper Shipping Name (RID)	: Not applicable

#### 14.3. Transport hazard class(es)

##### ADR

Transport hazard class(es) (ADR)	: 6.1
Hazard labels (ADR)	: 6.1

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### IMDG

Transport hazard class(es) (IMDG) : 6.1

### IATA

Transport hazard class(es) (IATA) : 6.1

### ADN

Transport hazard class(es) (ADN) : Not applicable

### RID

Transport hazard class(es) (RID) : 6.1

Danger labels (RID) : 6.1



### 14.4. Packing group

Packing group (ADR) : III  
Packing group (IMDG) : III  
Packing group (IATA) : Not applicable  
Packing group (ADN) : Not applicable  
Packing group (RID) : Not applicable

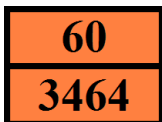
### 14.5. Environmental hazards

Dangerous for the environment : No  
Marine pollutant : No  
Other information : No supplementary information available

### 14.6. Special precautions for user

#### 14.6.1. Overland transport

Classification code (ADR) : T2  
Excepted quantities (ADR) : E1  
Hazard identification number (Kemler No.) : 60  
Orange plates :



Tunnel restriction code (ADR) : E

#### 14.6.2. Transport by sea

MFAG-No : 151

#### 14.6.3. Air transport

#### 14.6.4. Inland waterway transport

Not subjected to ADN : No

#### 14.6.5. Rail transport

Classification code (RID) : T2  
Carriage prohibited (RID) : No

### 14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

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### SECTION 15: Regulatory information

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

##### 15.1.1. EU-Regulations

No REACH Annex XVII restrictions

##### 15.1.2. National regulations

No additional information available

#### 15.2. Chemical safety assessment

No additional information available

### SECTION 16: Other information

Full text of R-, H- and EUH-phrases:

Acute Tox. 3 (Oral)	Acute toxicity (oral), Category 3
Carc. 1B	Carcinogenicity, Category 1B
Muta. 1B	Germ cell mutagenicity, Category 1B
Repr. 1B	Reproductive toxicity, Category 1B
H301	Toxic if swallowed
H340	May cause genetic defects
H350	May cause cancer
H360D	May damage the unborn child
R25	Toxic if swallowed
R45	May cause cancer
R46	May cause heritable genetic damage
R61	May cause harm to the unborn child
T	Toxic

SDS EU (REACH Annex II)

*This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product*