

# Safety Data Sheet

## According to Regulation (EC) No 1907/2006

N-(cyclohexylthio)phthalimide

Version 1.0

Issue date: 17/10/2013

Revision date: 17/10/2013

SDS Record Number: CSSS-TCO-010-113554

### Section 1 Identification of the substance/mixture and of the company/undertaking

#### 1.1 Product identifier:

Identification on the label/Trade name: N-(cyclohexylthio)phthalimide  
Additional identification: Cyclohexylthiophthalimide; N-Cyclohexylsulfenylphthalimide  
Identification of the product: CAS# 17796-82-6; EC# 241-774-1  
Index Number: Not available.  
REACH registration No.: Not available.

#### 1.2 Relevant identified uses of the substance and uses advised against:

##### 1.2.1 Identified uses:

It is a high effective pre-vulcanization inhibitor of rubbers especially of diene compounds with cure system consisting of sulfur and tiazole but mainly sulfenamide accelerators.

##### 1.2.2 Uses advised against:

Not available.

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

Supplier(Only representative): Chemical Inspection & Regulation Service Limited  
Supplier(Manufacturer): SHANGHAI ROKEM INTERNATIONAL CO.,LTD.  
Address: 9D, DOUBLE DOVE GREAT TOWDER, 438 PUDIAN ROAD, SHANGHAI  
Contact person(E-mail): robertliu@rokem.com  
Telephone: +86-532-88181138  
Fax: -

#### 1.4 Emergency telephone Number:

+353 41 980 6916

Available outside office hours?

YES

NO

### Section 2 Hazards Identification

#### 2.1 Classification of the substance/mixture

##### 2.1.1 Classification:

The substance is classified as following according to 67/548/EEC and REGULATION (EC) No 1272/2008:

REGULATION (EC) No 1272/2008	
Hazard classes/Hazard categories	Hazard statement
Skin Sens. 1	H317
Aquatic Acute 1	H400
Aquatic Chronic 1	H410

For full text of H- phrases: see section 2.2.

67/548/EEC	
Hazards characteristics	R-Phrases
-	R43

Product name: N-(cyclohexylthio)phthalimide

Version #: 1.0 Revision date: 17-10-2013. Issue date: 17-10-2013.

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For full text of R- phrases: see section 16.

## 2.2 label elements

### Hazard Pictograms:



### Signal Word(S):

Warning

### Hazard Statement:

H317: May cause an allergic skin reaction.

H410: Very toxic to aquatic life with long lasting effects.

### Precautionary statement

P261: Avoid breathing dust/fume/gas/mist/vapours/spray

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

P273: Avoid release to the environment.

P280: Wear protective gloves/protective clothing/eye protection/face protection.

P302 + P352: IF ON SKIN: Wash with plenty of soap and water.

P333 + P313: If skin irritation or rash occurs: Get medical advice/attention.

P321: Specific treatment(see information on this label)

P363: Wash contaminated clothing before reuse.

P391: Collect spillage.

P501: Dispose of contents/container in according with local regulation.

## 2.3 Other hazards

The substance is not considered a PBT/vPvB.

## Section 3 Composition/information on ingredients

### Substance/Mixture:

Substance

### Ingredient(s):

Chemical Name	Registration No.	CAS No.	EC No.	Concentration
N-(cyclohexylthio)phthalimide	N/A	17796-82-6	241-774-1	96%

## Section 4 First aid measures

### 4.1 Description of first aid measures:

In all cases of doubt, or when symptoms persist, seek medical attention.

#### 4.1.1 In case of inhalation:

Remove from exposure, take exposed person to fresh air.

#### 4.1.2 In case of skin contact:

Wash skin with warm water and treat with protective cream.

#### 4.1.3 In case of eyes contact:

Wash out the eye with plenty of clean water .

#### 4.1.4 In case of ingestion:

Drink cc 0.5 l lukewarm water, do not induce vomiting.

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

May cause an allergic skin reaction.

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

If skin irritation or rash occurs, get medical advice/attention.

## Section 5 Fire-Fighting measures

### 5.1 Extinguishing media:

**Suitable extinguishing media:** Water foam.

**Unsuitable extinguishing media:** Carbon dioxide.

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

CO<sub>2</sub> + SO<sub>2</sub> + NO<sub>x</sub>, if insufficient air by combustion toxic CO may arise.

### 5.3 Special fire fighting methods and special protective actions for fire-fighters:

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

## Section 6 Accidental release measures

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

**6.1.1 For non-emergency personnel:** Prevent the contact of the substance with glowing articles and prevent the initiating of fire or explosion of CTP dust with air.

**6.1.2 For emergency responders:** Wear an appropriate NIOSH/MSHA approved respirator if dust is generated.

### 6.2 Environmental Precautions:

Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Do not allow material to be released to the environment without proper governmental permits. Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

### 6.3 Methods for Containment and Cleaning up:

Collection of contaminated dust into a vessel for waste or liquidation in incinerating plant.

### 6.4 Reference to other sections:

See Section 7 for information on safe handling.

See section 8 for information on personal protection equipment.

See Section 13 for information on disposal.

### 6.5 Additional information:

Not applicable.

## Section 7 Handling and storage

### 7.1 Precautions for safe handling:

#### 7.1.1 Protective measures:

To handle as with flammables, of which the dust with air can be explosive. Electronic installation in spaces of handling with Duslin® P must be in accordance with regulations for explosive environment. Handling with opened fire is forbidden. The empty wrappings from Duslin® P must be rid of substance rests on walls before repairing (cleaning by means of detergents etc.). The empty paper bags to liquidate in incinerating plant of wastes.

#### 7.1.2 Advice on general occupational hygiene:

Do not eat, drink and smoke in work areas. Wash hands after use. Remove contaminated clothing and protective equipment before entering eating areas.

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

CTP is stored in original multi-layer paper bags or big-bags on pallets or in closed tanks with venting trough dust filter under slight overpressure of nitrogen atmosphere. CTP tends to caking, consequence is proportional to the higher temperature, pressure and storage time.

Maximum storage temperature is 35°C. Storage life in undamaged original packaging is one year under the observation of storage conditions.

Adequate amount and volume of extinguishing technique is needed. Electric

installation and lighting must be suitable into explosive space.

### 7.3 Specific end use(s):

Not applicable.

## Section 8 Exposure Controls/Personal Protection

### 8.1 Control parameters:

8.1.1 Occupational exposure limits: Not available

8.1.2 Additional exposure limits under the conditions of use: Not available

8.1.3 DNEL/DMEL and PNEC-Values: Not available

### 8.2 Exposure controls

8.2.1 Appropriate engineering controls: Dust mixed with air can be explosive so that prevent of excess dusting, ensure a sufficient ventilation.

#### 8.2.2 Individual protection measures, such as personal protective equipment:

Eye/face protection: Use suitable protective goggles.

Hand protection: Use suitable protective gloves.

Body protection: Put on suitable protective clothes.

Respiratory protection: Keep the lowest possible level of the dust concentration in air, in case of dusting, use a respirator.

Thermal hazards: No information is available.

8.2.3 Environmental exposure controls: Prevent uncontrolled release to environment.

## Section 9 Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

Appearance	Solid, Powder
Colour:	White
Odour:	Slight
Odour threshold:	Not available
pH:	Not available
Melting point/range (°C):	91-95°C(ca. 101.3 kPa)
Boiling point/range (°C):	Not available
Flash point (°C):	150.3-156.5°C(101.325 kPa)
Evaporation rate:	Not available
Flammability limit - lower (%):	Not available
Flammability (solid, gas):	Non flammable.
Ignition temperature (°C):	Not available
Upper/lower flammability/explosive limits:	Not available
Vapour pressure:	Not available
Vapour density:	Not available
Relative Density:	Not available
Bulk density (kg/m <sup>3</sup> ):	ca. 1.354 g/cm <sup>3</sup> (20°C)
Water solubility (g/l):	12.4 mg/L(20°C)
n-Octanol/Water (log Po/w):	Not available
Auto-ignition temperature:	Not available
Decomposition temperature:	Not available

<b>Viscosity, dynamic (mPa.s):</b>	Not relevant, substance is solid
<b>Explosive properties:</b>	Non explosive
<b>Oxidising properties:</b>	Not oxidizing
<b>Molecular Formula:</b>	C <sub>14</sub> H <sub>15</sub> NO <sub>2</sub> S
<b>Molecular Weight:</b>	261.34

## 9.2. Other information:

<b>Fat solubility(solvent– oil to be specified) etc:</b>	Not available
<b>Surface tension:</b>	Not available
<b>Dissociation constant in water( pKa):</b>	Not available
<b>Oxidation-reduction Potential:</b>	Not available
<b>Specific gravity:</b>	Not available

## Section 10 Stability and reactivity

<b>10.1 Reactivity:</b>	The substance is stable under normal storage and handling conditions.
<b>10.2 Chemical stability:</b>	Stable at room temperature in closed containers under normal storage and handling conditions. It decomposes at temperature around 120°C.
<b>10.3 Possibility of hazardous reactions:</b>	No dangerous reactions are known.
<b>10.4 Conditions to avoid:</b>	Incompatible materials. High temperature.
<b>10.5 Incompatible materials:</b>	Strong oxidizing agents.
<b>10.6 Hazardous decomposition products:</b>	CO <sub>2</sub> + SO <sub>2</sub> + NO <sub>x</sub> , if insufficient air by combustion the toxic CO may arise.

## Section 11 Toxicological information

### 11.1 Toxicokinetics, metabolism and distribution

<b>Non-human toxicological data:</b>	Not available
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### 11.2 Information on toxicological effects

<b>Acute toxicity:</b>	
<b>LD50(Oral, Rat):</b>	≥2000 mg/kg bw
<b>LD50(Dermal, Rabbit):</b>	≥2000 mg/kg bw
<b>LC50(Inhalation, Rat):</b>	Not available

<b>Skin corrosion/Irritation:</b>	Slightly irritating.
<b>Serious eye damage/irritation:</b>	Moderately irritating.
<b>Respiratory or skin sensitization:</b>	May cause an allergic skin reaction.
<b>Respiratory or skin sensitization:</b>	Not classified
<b>Germ cell mutagenicity:</b>	Not classified
<b>Carcinogenicity:</b>	Not classified
<b>Reproductive toxicity:</b>	Not classified
<b>STOT- single exposure:</b>	Not classified
<b>STOT-repeated exposure:</b>	Not classified
<b>Aspiration hazard:</b>	Not classified

## Section 12 Ecological information

### Toxicity:

Acute toxicity		Time	Species	Method	Evaluation	Remarks
LC50	0.69mg/l	96h	Fish	OECD 203	N/A	N/A
EC50	1.21 mg/L	48h	Daphnia	OECD 202	N/A	N/A
EC50	> 0.093 mg/L	72h	Algae	OECD 201	N/A	N/A

<b>Persistence and degradability:</b>	Not readily biodegradable.
<b>Bioaccumulative potential:</b>	Not available.
<b>Mobility in soil:</b>	Not available.
<b>Results of PBT&amp;vPvB assessment:</b>	The substance is not considered a PBT/vPvB.
<b>Other adverse effects:</b>	Very toxic to aquatic life with long lasting effects.

## Section 13 Disposal considerations

<b>13.1 Waste treatment methods</b>	The material should be disposed of by incineration in a chemical incinerator in compliance with national and regional requirements.
<b>13.2 Product / Packaging disposal:</b>	If empty container retains product residues, all label precautions must be observed. Return for reuse or dispose according to national or local regulations.

## Section 14 Transport information

	Land transport(ADR/RID)	Sea transport (IMDG)	Air transport (ICAO/IATA)
<b>UN-Number:</b>	3077	3077	3077
<b>UN Proper shipping name:</b>	Environmentally hazardous substance, solid, n.o.s.( N-(cyclohexylthio)phthalimide)	Environmentally hazardous substance, solid, n.o.s.( N-(cyclohexylthio)phthalimide)	Environmentally hazardous substance, solid, n.o.s.( N-(cyclohexylthio)phthalimide)
<b>Transport hazard Class:</b>	9	9	9
<b>Packaging group:</b>	III	III	III
<b>Environmental hazards:</b>	Yes	Yes	Yes
<b>Special precautions for user:</b>	See section 2.2	See section 2.2	See section 2.2
<b>Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code</b>	IBC08	IBC08	IBC08

## Section 15 Regulation information

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

<b>Relevant information regarding authorization:</b>	Not applicable.
<b>Relevant information regarding restriction:</b>	Not applicable.
<b>Other EU regulations:</b>	Employment restrictions concerning young person must be observed. For use only by technically qualified individuals.
<b>Other National regulations:</b>	Not applicable
<b>Chemical Safety Assessment has been carried out?</b>	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>

## Section 16 Other information

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### 16.1 Indication of changes

Version 1.0 Amended by EU No 453/2010

### 16.2 Relevant R- phrases (number and full text):

R43 May cause sensitisation by skin contact.

R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

### 16.3 Training instructions:

Not applicable.

### 16.4 Further information:

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.

### 16.5 Notice to reader:

Employers should use this information only as a supplement to other information gathered by them, and should make independent judgment of suitability of this information to ensure proper use and protect the health and safety of employees. This information is furnished without warranty, and any use of the product not in conformance with this Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user.

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