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**MATERIAL SAFETY DATA SHEET**

**MSDS # PMC/RC/025/06**

Updated on 02 - Jan - 2006  
Product Name ACCITARD RE  
Revision Number +REV 04  
UN Number 3077  
CAS No. 17796-82-6

|                       |   |
|-----------------------|---|
| Health Hazard :       | 2 |
| Fire Hazard :         | 1 |
| Reactivity :          | 0 |
| Personal Protection : | X |

**1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY/UNDERTAKING**

**PRODUCT NAME: ACCITARD RE**

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**2. COMPOSITION/INFORMATION ON INGREDIENTS**

**PRODUCT DESCRIPTION** N-(cyclohexyl thio) phthalimide; CTP

| <b>HAZARDOUS INGREDIENT(S)</b> | <b>CAS No.</b> | <b>Symbol</b> | <b>R Phrases</b> |
|--------------------------------|----------------|---------------|------------------|
| N-Cyclohexyl Thio Phthalimide  | 17796-82-6     | Xi, N         | R43,R50/53       |

| <b>Components</b>             | <b>CAS #</b> | <b>Percentage (W/W)</b> |
|-------------------------------|--------------|-------------------------|
| N-Cyclohexyl Thio Phthalimide | 17796-82-6   | 97 – 99                 |
| Butyl Oleate                  | 142-77-8     | 0.5 – 1.5               |

**3 HAZARDS IDENTIFICATION**

Hazard Information :

Emergency Overview : WARNING ! Combustible dust : Keep away from heat, sparks and flame. May be irritating to eyes and skin and respiratory tract. May cause allergic skin reaction. Toxic to aquatic organisms.

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Eye Contact : May cause eye irritation, symptoms may include redness, tearing & swelling after prolonged or repeated contact.

Skin Contact : May cause an allergic skin reaction. May cause a rash and itching of the skin with prolonged exposure. May be absorbed through the skin and cause symptoms related to ingestion.

Inhalation : May cause upper respiratory irritation.

Produces sublimed phthalimide when used at normal rubber processing temperatures. Phthalimide has been examined for teratogenicity with conflicting results in different animal species, and between different strains of the same species. On present evidence the hazard resulting from industrial exposure to phthalimide or Cyclohexylthiophthalimide is likely to be minimal. Incompatible with acids. In common with many organic compounds in powder form it can produce flammable dust clouds in air.

#### **4. FIRST-AID MEASURES**

Inhalation : May cause vomiting. Remove patient from exposure. Obtain medical attention if ill effects occur.

Skin Contact : May cause an allergic skin reaction. May cause rash and itching of the skin. Remove contaminated clothing. Wash skin immediately with soap and water. If symptoms (irritation or blistering) occur obtain medical attention. Contaminated clothing should be laundered before re-use.

Eye Contact : Immediately irrigate with eyewash solution or clean water, holding the eyelids apart, for at least 10 minutes. Obtain immediate medical attention.

Ingestion : May cause stomach discomfort. May cause vomiting. Do not induce vomiting. Wash out mouth with water and give 200-300 ml (half a pint) of water to drink. Obtain medical attention.

#### **Further Medical Treatment**

Symptomatic treatment and supportive therapy as indicated.

#### **5. FIRE-FIGHTING MEASURES**

Flash Point : 187°C /370°F (Open cup)

Auto ignition Temp : 349°C (Dust)

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- Combustible : In common with many organic compounds in powder form it can produce flammable dust clouds in air. Combustion or thermal decomposition will evolve very toxic, irritant and extremely flammable vapours.
- Combustion products : Nitrogen oxides, carbon monoxide, carbon dioxide and sulphur oxides. If involved in a fire, emits toxic fumes, wear breathing apparatus.
- Extinguishing Media : Water spray, foam, dry powder or CO2. Do not use water jet. (Avoid dust generation.)
- Fire Fighting Protective Equipment : A self contained breathing apparatus and suitable Protective clothing should be worn in fire conditions.

## **6. ACCIDENTAL RELEASE MEASURES**

Do not allow to enter drains, sewers or watercourses.  
Control dust formation. (See 'Fire fighting measures')  
Collect spillages by mechanical means. Transfer to a container for disposal or recovery.  
Ensure suitable personal protection during removal of spillages.

## **7. HANDLING AND STORAGE**

### **7.1 HANDLING**

Wear safety glasses, gloves and apron when handling.  
Control dust formation. (See 'Fire fighting measures'.)  
Avoid contact with skin and eyes.  
Avoid inhalation of high concentrations of dusts. Atmospheric concentrations should be minimised and kept as low as reasonably practicable.

### **7.2 STORAGE**

Store closed containers in a cool, dry and well-ventilated place away from direct sunlight. Store away from oxidising agents, acids, alkalis, moisture, heat and ignition sources.  
Suitable containers: High density polyethylene (HDPE) laminated paper bags with polythene liner inside.

Storage Temperature : Ambient (NTP).  
Storage Life : 1 year(s)

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## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Eye Protection : Wear suitable gloves to protect against exposure.

Skin Protection : Use gloves and aprons as standard industrial handling procedure.  
Launder contaminated clothing before reuse.

Respiratory Protection : Wear suitable respiratory protective equipment if exposed to high levels of dust are likely.

Ventilation : Exhaust ventilation as necessary to control air contaminants during use of this product.

### Occupational Exposure Limits

Not published but 2.5mg/m<sup>3</sup> is recommended.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

|                             |   |
|-----------------------------|---|
| Form:                       | Powder/pellets non-staining   |
| Colour:                     | Light tan   |
| Odour:                      | Slight Mercaptan.   |
| pH (Value):                 | Not applicable.   |
| Specific gravity            | 1.3   |
| Melting Point (Deg C):      | 89  |
| Flash Point (Deg C):        | 187.  |
| Flammable Limits:           | No data.  |
| Auto Ignition Temp (Deg C): | 349°C (Dust)  |
| Explosive Properties:       | In common with many organic compounds in powder form it can produce flammable dust clouds in air. |
| Oxidising Properties:       | No data.  |
| Vapour Pressure (mm Hg):    | No data.  |
| Solubility (Water):         | Insoluble   |
| Solubility (Other):         | Soluble in toluene, alcohols  |
| Molecular Weight            | 261.34  |
| Molecular Formula           | C14-H15-O2-N-S  |

## 10. STABILITY AND REACTIVITY

Chemical Stability : Stable when stored at NTP in closed, original container.

Stable under normal conditions of handling, use & transportation.

Hazardous Polymerisation : Will not occur.

Conditions to Avoid : Keep away from heat, sparks, flame & moisture.

Materials to Avoid : Oxidising agents, acids and alkalis.

Hazardous Decomposition Product(s) : Oxides of Carbon, Nitrogen & Sulphur.

(See ' Fire fighting measures' .)

## 11. TOXICOLOGICAL INFORMATION

Oral Acute oral LD50 (Rat) >2600mg/kg  
Dermal Acute Dermal LD50 (Rabbit) >5100 mg/kg  
Principle Routes of Exposure : Eyes, Inhalation and Dermal (Skin)

Inhalation: High concentrations of dust may be irritant to the respiratory tract.  
May cause vomiting.  
Combustion or thermal decomposition will evolve very toxic and irritant vapours.

Skin Contact: May cause sensitisation by skin contact. Irritating to skin.

Eye Contact: May cause eye irritation, symptoms may include swelling, redness and tearing.

Ingestion: Low oral toxicity. May be harmful if large amounts are swallowed  
May cause stomach discomfort. May cause vomiting.

Carcinogenicity Negative in the standard test using bacteria and yeast cells.  
Genotoxicity Negative for genetic activity – in vitro and in vivo tests.  
Reproductive/ Developmental No evidence of teratogenicity in animals using rats and mice.  
Toxicity

## 12. ECOLOGICAL INFORMATION

Acute Fish Toxicity 96 hr LC50 Rainbow Trout – 0.40 mg/l  
96 hr LC50 Bluegill Sunfish – 1.20 mg/l  
Acute Algae Toxicity 96 hr EC50 Algae – 21 mg/l  
Octanol/Water Coefficient Log P = 3.76  
Chemical fate Information Bioconcentration Factor – 130  
This material will not bioaccumulate or persist in the environment  
WGK (2) Self Classification

## 13. DISPOSAL CONSIDERATIONS

Disposal should be in accordance with local, state or national legislation.  
Disposal of container according to national/local regulations.

#### 14. TRANSPORT INFORMATION

Not Classified as Dangerous for Transport .

Marine Pollutant : Not classified as a Marine Pollutant  
Maritime Transport  
IMDG Class : 9  
UN Number : 3077  
Packing Group : III  
Proper Shipping Name : Environmentally Hazardous Substance,  
Solid, N.O.S., (N-cyclohexylthiophthalimide),9, UN 3077, III

#### 15. REGULATORY INFORMATION

Not classified as dangerous for supply and use.

EC Classification: Irritant, Hazard Symbol Xi



Dangerous for the environment, N



Risk Phrases: R43:May cause sensitisation by skin contact.  
R50/53 Very toxic to aquatic organisms and may cause long-term effects in the aquatic environment.

Safety Phrases: S24 Avoid contact with skin.  
S36 Wear suitable protective clothing.  
S60 This material and/its container must be disposed of as hazardous waste.  
S61 Avoid release to the environment. Refer to special instructions/safety data sheets.

#### 16. OTHER INFORMATION

HMIS rating: Health: 2  
Flammability: 1  
Reactivity: 0  
PPI: X

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|        |           |   |
|--------|-----------|---|
| Legend | : 0(HMIS) | Minimal hazard  |
|        | 1(HMIS)   | Slight hazard   |
|        | 2(HMIS)   | Moderate hazard   |
|        | 3(HMIS)   | Serious hazard  |
|        | 4(HMIS)   | Severe hazard   |
|        | X(HMIS)   | Personal protective rating to be supplied by user depending on the use conditions |

Use : Pre vulcanisation inhibitor for rubber compounds.

FDA Status 21 CFR            Not regulated for Use under section 21 CFR 177.2600  
Rubber Articles Intended for Repeated Use in Food Contact.

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