# 河南省开仑化工有限责任公司

HENAN KAILUN CHEMICAL CO., LTD

中华人民共和国河南省滑县解放北路 25号

NO.25 JIEFANG NORTH ROAD, HUAXIAN HENAN, CHINA.

# MATERIAL SAFETY DATA SHEET

# For CTP(PVI)

# SECTION 1- PRODUCT AND COMPANY IDENTIFICATION

MSDS#: TYYX101

CHEMICAL NAME: N-(Cyclohexylthio)phthalimide

SYNONYMS: SANTOGARD PVI/ PILGARD PVI/ VULKALENT G/ ACITARD RE/SCORCH RETARDER

PVI/ CTPI/RUBBER ADDITIVES PVI (P)

**MANUFACTURER'S NAME:** 

HENAN KAILUN CHEMICAL CO.,LTD

**MANUFACTURER'S ADDRESS:** 

NO.25 JIEFANG NORTH RD, HUAXIAN HENAN. CHINA 456400

**EMERGENCY TEL. NO.:** 

86-372-8112391

**OTHER INFORMATION CALLS:** 

86-372-8127199

**DATE PREPARED**: 03/03/2002

#### **SECTION 2- COMPOSITION /INFORMATION ON INGREDIENTS**

COMPONENTS/ CAS NO.

**PERCENT** 

N-cyclohexylthiophthalimide

17796-82-6

97-99

# **SECTION 3- HAZARDOUS IDENTIFICATION**

This material is identified as a hazardous chemical under the criteria of OSHA Hazardous Communication Stardard(29CFR1910.1200)

# **WARNING!**

**EMERGENCY OVERVIEW:** Cause eye and skin irritation, inhalation of odor after skin contact may cause NAUSEA

#### POTENTIAL ROUTES OF EXPOSURE:

Eye contact: Cause eye irritation based upon animal data.

Skin contact: May cause skin irritation

Repeated or prolonged contact can cause allergic skin reaction in sensitive persons.

Inhalation: May cause respiratory tract irritation

Inhalation of odor after skin contact may cause Nausea.

Ingestion: Slightly toxic if swallowed based upon animal data.

#### **SECTION 4- FIRST AID MEASURES**

**IN EYES:** Flush promptly with plenty of water for at least 15 minutes. Hold eyelids apart to ensure complete rinsing of entire eye surface. Remove material from skin and clothing. Get medical attention if irritation develops.

**ON SKIN:** Flush skin with plenty of water. Remove contaminated clothing promptly and wash skin with plenty of soap and water. Launder clothing and lean protective equipment before reuse. Get medical attention if irritation develops.

**IF POST-CONTACT**: Remove victim to fresh air. If victim is not breathing, begin artificial respiration.

**IF ODOR IS INHALED**: Breathing is difficult, give oxygen and get immediate medical attention.

**INGESTED**: Contact a physician or Poison Control Center immediately. If victim is conscious and alert, give several glasses of water to drink. Do not induce vomiting unless instructed to do so by a medical professional. NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS OR CONVULSING PERSON.

# **SECTION 5- FIRE FIGHTING MEASURES**

APPEARANCE: Light tan to white crystalline powder or white granules

**FLASH POINT**, **F**/**C**:350/177

**AUTOIGNITION TEMP F**/**C** :660/349

FLASH METHOD: PENSKY-MARTENS CLOSED CUP

**EXTINGUISHING METHOD:** Water spray or other Class A extinguishing agent.

**PROCEDURES AND EQUIPMENT:** Firefighters and other emergency respssure demand self-contained breathing apparatus. Dike fire water for later disposal. Do not allow contaminated water to enter storm sewers, watersheds or waterways. Equipment should be thoroughly decontaminated after use.

**Hazardous Product**: Carbon monoxide, sulfur dioxide and nitrogen oxides are products or combustion.

**FIRE AND EXPLOSION HAZARDS**: This material is sometimes sold as a milled grade. The fine particle size of this grade creates the potential for dust explosions oonders should wear full impervious protective clothing, boots and positive pressure/ prer fires. For operations involving milled material or for additions to flammable solvents, use only **Class II Division I** electrical equipment. Ensure that all equipment is properly grounded.

Electrostatic charges can form when this material is poured, allowed to free-fall, or is conveyed through

chutes and pipes. This may cause ignition of the material itself, or of any flammables in contact with the material or its container. When transferring this material ground all equipment, provide an inert atmosphere and properly design materials handling equipment to prevent the formation of electrostatic chares.

# SECTION 6- ACCIDENTAL RELEASE MEASURES

**PILL OR LEAK**: Avoid creating a dust cloud. Avoid skin contact. Wear a MSHA approved respirator, appropriate protective clothing and chemical resistant gloves. Remove or turn off any ignition sources in the area.

Vacuum or shovel up spilled material and place in a dry, covered container for reuse or

chemical disposal. Use vacuum equipment DESIGNED SPECIALLY for handling combustible dusts. Flush spill area with water. Keep this material out of storm drains, watersheds and waterways.

**REPORTABLE QUANTITY: N/A** 

# **SECTION 7- HANDLING AND STORAGE**

**HANDLING:** Avoid contact with eyes, skin and clothing. Avoid breathing vapor and dust. Keep container tightly closed when not in use. Use with adequate ventilation. Wash thoroughly after handling and before eating, drinking, smoking or applying cosmetics. Work clothes should be washed at the end of each work day. Empty container retains vapor and product residue. Observe all labeled safeguards until container is cleaned, reconditioned, or destroyed. Do not reuse this container for other materials.

**STORAGE:** Store closed containers in a cool, dry, well-ventilated area. Avoid storage with foodstuffs and animal feeds. Avoid storage near strong acids. Avoid exposure to direct sunlight.

#### SECTION 8- EXPOSURE CONTROL/PERSONAL PROTECTION

**EYE PROTECTION: PVI** can cause eye irritation. Where there is potential for eye contact, wear chemical goggles and have eye flushing equipment available in the immediate handling/ use area. Avoid eye contact as good industrial practice.

**SKIN PROTECTION**: Wear chemical resistant gloves and long sleeved clothing to prevent skin contact. Consult glove manufacturer for appropriate glove type for the given application. Wear a face shield and chemical resistant clothing such as a rubber apron when splashing is likely. Wash contaminated skin promptly with plenty of soap and water. Launder contaminated clothing and clean protective equipment before refuse. Wash thoroughly with soap and water after handling and before eating, drinking, smoking or applying cosmetics.

**ATTENTION:** REPEATED OR PROLONGED EXPOSURE CAN CAUSE ALLERGIC SKIN REACTION IN SENSITIVE PERSONS!

**RESPIRATORY:** Avoid breathing dust or vapor of this material. Use NIOSH/MSHA approved respiratory.

**PROTECTION:** Protection equipment when airborne exposure is excessive. Observe respirator use limitations specified by NIOSH/MSHA or the manufacturer. Respiratory protection programs must comply with 29 CFR 1910.134

VENTILATION: Provide natural or mechanical ventilation to minimize exposure. If practical,

#### use local mechanical exhaust ventilation at sources of air contamination such as

open process equipment.

**AIRBORNE EXPOSURE LIMITS:** 

**COMPONENT:** N-(Cyclohexylthio)Phthalimide

OSHA PEL/8-Hr TWA: Not established ACGIN TLV/8-Hr TWA: Not established

**NOTE:** 

Human experience has shown that skin absorption or inhalation of PVI(CTP,)may result in an objectionable

body odor during subsequent washing or showering. A bad in the mouth may also be experienced. Avoid skin

contact and inhalation!

#### **SECTION 9- PHYSICAL AND CHEMICAL PROPERTIES**

APPEARANCE: LIGHT TAN TO WHITE CRYSTALLINE POWDER OR WHITE PELLET

**ODOR:** Mercaptan

**SPECIFIC GRAVITY:** 1.25-1.35 mg/m<sup>3</sup>@25°C

WATER SOLUBILITY: Insoluble

**OTHER SOLUBILITY:** Soluble in Benzene, Acetone Ether, Toluene, Ethyl Acetate, heated Carbon Alcohol,

Heptane **DENSITY:** N/A

**MELTING POINT:** 90-94℃

**MOLECULAR FORMULA:** C<sub>14</sub>H<sub>15</sub>O<sub>2</sub>SN

**MOLECULAR WEIGHT: 261** 

# **SECTION 10- STABILITY AND REACTIVITY**

**STABILITY:** Slowly degrades at temperatures above 156°C

AVOID WITH: Strong acid, alkali

Storage at elevated temperature and humidity. Exposure to direct sunlight.

**NOTE:** 

This material may catch fire and release toxic fumes if it is strongly heated.

**DECOMPOSITION**: Gases of nitrogen oxides, sulfur dioxide and carbon monoxide are product of

combustion.

HAZARDOUS POLYMERIZATION: Will not occur.

# SECTION 11- TOXICOLOGICAL INFORMATION

**Target organ**: skin, eyes and respiratory tract

Oral LD50(rat):>2600 mg/kg slightly toxic

Dermal LD50(rabbit): >5010 mg/kg practically Non-Toxic

Eye Irritation (rabbit/24-hrs): 5.5-110.0 slightly Irritating
Skin Irritation (rabbit/24-hrs): 0.0-8.0 Practically Non-irritating

**SKIN**: Complaints of body odor are frequent as a result of total body exposure. These odor may last for several days. Patch testing on human volunteers indicates that this material is primary irritant, a cumulative irritant and a sensitizer.

**INHALATION**: Respiratory tract irritation has been reported by workers exposed to product dust. Inhalation of product odor following skin contact has caused nausea in some persons.

#### **CARCINOGENICITY/ MUTAGENICITY:**

This material is not considered to be teratogenic, carcinogenic or mutagenic based upon animal and microbial test results.

# SECTION12- ECOLOGICAL INFORMATION

# Acute Toxicity- aquatic species:

96-hr	LC50	Bluegill	1.20mg/l	Moderately Toxic
96-hr	LC50	Trout	0.40 mg/l	Highly Toxic
96-hr	LC50	Fathead Minnow	0.42mg/l	Highly Toxic
96-hr	EC50	Algae, cell number	21.00mg/l	Slightly Toxic
48-hr	LC50	Daphnia Magna	32.00 mg/l	Slightly Toxic
Octanol/ Water partition coefficient:			4600	

#### **SECTION 13- DISPOSAL CONSIDERATIONS**

When discarded, this material is not a hazardous waste as defined by the Resource Conservation and Recovery Act(RCRA), 40 CFR261. Disposal via incineration is recommended.

Burn in an approved incinerator or landfill in a secure, approved landfill in accordance with all applicable federal state and local regulations.

Empty container retains vapor and product residue. Burn in an approved incinerator or landfill in a secure landfill in accordance with all applicable federal, state and local regulations.

# SECTION14- TRANSPORT INFORMATION

**DOT Shipping Name: NONE** 

**DOT Reportable Quantity (lbs):** None

IMDG:Status: Not Regulated Proper Shipping Name: None

**DOT Hazard Class/I.D**: Not regulated

#### SECTION15- REGULATORY INFORMATION

TSCA: All components listed

**DSL**: All components listed **Worldwide Inventory Status** 

TSCA (USA): Listed Canadian DSL: Listed Canadian NDSL: N/A

**EINECS/ELINCS (Europe):** Listed **Japanese Inventory (ENCS):** Listed

Korean Chemical Inventory (ECL): Listed

**Australian Chemical Inventories** 

(AICS):Listed

New Zealand (NZ): Listed

Phillipines (PICCS) Inventory: Listed

China (CLECS): Listed US Regulatory Rules

SARA Section 302: None Found

#### **SECTION 16- OTHER INFORMATION**

**ABBREVIATION**: N/A---NOT APPLICABLE

N/D---NOT DETERMINED

**PREPARED TIME**:MARCH 3, 2002 **REVISION**: IN APRIL 25, 2003

<u>IMPORTANT SAFETY NOTICE:</u> The information in the Material Safety Data Sheet relates only to the specific material described herein and does not relate to use in combination with any other material or substance and does not relate to use in combination with any other material or substance or in any process. We believe that the information contained herein is current as of the date of issue of this Material Safety Data Sheet. Since the use of this product are not within the control of Henan Tangyin Yongxin Auxiliary Agent Factory, it is the user's obligation to determine the condition of safe use of the product.

Users of this product should study this Material Safety Data Sheet and become aware of the product hazards and safety information before using the product. Users should also notify their employees, agents and contractors of the information on the Material Safety Data Sheet and any product hazards and safety information in order to provide safe use of this product.