

# SAFETY DATA SHEET



## Chlorthalidone Tablets 25 & 50 mg

### SECTION 1: IDENTIFICATION

- GHS product identifier** : Chlorthalidone Tablets 25 & 50 mg
- Chemical name** : 2-chloro-5-(1-hydroxy-3-oxoisindolin-1-yl)benzenesulfonamide;  
Hygroton; NSC 69200; Oradil.
- Synonyms** : Chlorthalidone Tablets
- Product code** : Not available.
- Chemical family** : Not available.
- Product type** : Prescription drug
- Container information** : Store in tight light resistant containers. Store at 20°C to 25°C temperature.  
(USP controlled room temperature).

#### Identified uses

Chlorthalidone is used to treat high blood pressure (hypertension). Lowering high blood pressure helps prevent strokes, heart attacks, and kidney problems.

- Supplier's details** : Elysium Pharmaceuticals Limited  
Post-Dabhasa, Tal- Padra  
Dist- Vadodara, Gujarat-391449

- Emergency telephone no.** : +91-2662- 223825, 223295

### SECTION 2: HAZARDS IDENTIFICATION

- OSHA/HCS status** : This Product is considered as non-hazardous by the OSHA. Hazard communication Standard 2012
- Classification of the substance or mixture** : Classification according to Regulation (EC) No 1272/2008  
Skin Corrosion/Irritation, Category 2  
Serious Eye Damage/Eye Irritation, Category 2  
Toxic To Reproduction, Category 1B  
Target Organ Systemic Toxicity (single exposure), Category 3

#### GHS LABEL ELEMENTS

The Product is classified and labeled according to the Globally Harmonized System (GHS)

#### Hazard Pictograms



1.



2.

- Signal word** : Warning and danger
- GHS Hazard Phrases** : H315: Causes skin irritation.  
H319: Causes serious eye irritation.  
H360: May damage fertility or the unborn child.  
H335: May cause respiratory irritation.

**SECTION 2: HAZARDS IDENTIFICATION**

<b>GHS Precaution Phrases</b>	: P264: Wash {hands} thoroughly after handling. P280: Wear {protective gloves/protective clothing/eye protection/face protection}. P362+364: Take off contaminated clothing and wash it before reuse. P201: Obtain special instructions before use. P202: Do not handle until all safety precautions have been read and understood. P281: Use personal protective equipment as required. P261: Avoid breathing {dust/fume/gas/mist/vapor's/spray}.
<b>GHS Response Phrases</b>	: P302+352: IF ON SKIN: Wash with plenty of soap and water. P332+313: If skin irritation occurs, get medical advice/attention. P305+351+338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337+313: If eye irritation persists, get medical advice/attention. P308+313: IF exposed or concerned: Get medical attention/advice. P304+340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. P312: Call a {POISON CENTER/doctor} if you feel unwell.
<b>GHS Storage and Disposal Phrases</b>	: Dispose of contents and container in accordance with all local, regional, national and International regulations
<b>Hazard statements</b>	: Causes skin Irritation Causes serious eye Irritation May cause respiratory Irritation
<b>Adverse Human Health Effects and Symptoms</b>	: Causes serious eye irritation. : Causes skin irritation. Material may be irritating to the mucous membranes and upper respiratory tract. May be harmful by inhalation, ingestion, or skin absorption. May cause respiratory system irritation. May damage fertility or the unborn child. To the best of our knowledge, the toxicological properties have not been thoroughly investigated.
<b>Hazards not otherwise Classified</b>	: None known.

**SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**

<b>Substance/Mixture</b>	: Mixture
<b>Chemical Name</b>	: 2-chloro-5-(1-hydroxy-3-oxoisindolin-1-yl)benzenesulfonamide; Hygroton; NSC 69200; Oradil.
<b>Other means of Identification</b>	: Chlorthalidone Tablets
<b>Formula</b>	: C <sub>14</sub> H <sub>11</sub> C <sub>1</sub> N <sub>2</sub> O <sub>4</sub> S
<b>Molecular weight</b>	: 338.77 g/mol
<b>CAS-No.</b>	: 77-36-1
<b>EC-No.</b>	: 201-022-5

**SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**

CAS #	Hazardous Components (Chemical Name)	Concentration	EC No./ EC Index	GHS Classification
77-36-1	Chlorthalidone	100.0 %	201-022-5 NA	Skin Corr. 2: H315 Eye Damage 2: H319 TOST (SE) 3: H335, H336 Toxic Repro.1B:H360

\*For the full text of the H-Statements mentioned in this Section, see Section 16.

SR.NO	INGREDIENT NAME	%	CAS NUMBER
1	Chlorthalidone	30-34	77-36-1
2	Microcrystalline Cellulose 200**	45-55	9004-34-6
3	Sodium Starch glycolate	1.5-3.5	9063-38-1
4	Pre-gelatinized starch	8-14	9005-25-8
5	Colloidal Silicon dioxide	0.5-3	7631-86-9
6	Stearic acid powder	0.5-3.5	57-11-4

**Any concentration shown as a range is to protect confidentiality or is due to batch variation.**

There are no ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

**SECTION 4: FIRST AID MEASURES****DESCRIPTION OF NECESSARY FIRST AID MEASURES**

- Eye Contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 15 minutes. Get medical attention if irritation occurs.
- Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
- Skin contact** : Wash with plenty of soap and water. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 15 minutes. Get medical attention. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before Reuse.

**SECTION 4: FIRST AID MEASURES**

**Ingestion** : Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. If necessary, call a poison center or physician. Never give anything by mouth to an unconscious person. If Unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, and belt or waistband.

**MOST IMPORTANT SYMPTOMS/EFFECTS, ACUTE AND DELAYED**

**Potential Acute Health Effects** : No further relevant information available.

**Indication of immediate medical attention and special treatment needed, if necessary**

**Notes to Physician** : In case of inhalation of decomposition products in a fire, symptoms may be delayed.  
The exposed person may need to be kept under medical surveillance for 48 hours.

**Specific Treatments** : Treatment Should be given symptomatically.

**Protection of First-Aiders** : No action shall be taken involving any personal risk or without suitable training.  
It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.  
Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

**SECTION 5: FIRE-FIGHTING MEASURES****Extinguishing Media**

**Suitable Extinguishing media** : SMALL FIRE: Use DRY chemical powder.  
LARGE FIRE: Use water spray, fog or foam. Do not use water jet.

**Unsuitable Extinguishing media** : A solid water stream may be inefficient

**Specific Hazards arising from the chemical** : During combustion, may emit irritant fumes.

**Explosion Hazards in Presence of Various Substances** : Risks of explosion of the product in presence of mechanical impact: Not available. Risks of explosion of the product in presence of static discharge: Not available.

**SECTION 5: FIRE-FIGHTING MEASURES**

- Fire Hazards in Presence of Various Substances** : May emit poisonous and corrosive fumes.
- Fire incompatibility** : Avoid contamination with oxidizing agents i.e. nitrates, oxidizing acids, chlorine bleaches, pool chlorine etc. as ignition may occur
- Special Hazards arising from the products or Mixture** : Carbon Dioxide,  
Carbon Monoxide,  
Nitrogen Oxides NO<sub>x</sub>  
Sulfur oxide SO<sub>x</sub>  
Hydrogen Chloride gas
- Personal protections** : Glasses;  
Chemical Goggles;  
Gloves;  
Respirator;  
Particulate.
- Specific Protective actions for fire-fighters** : Alert Emergency Responders and tell them location and nature of hazard.  
Wear breathing apparatus plus protective gloves.
- Special protective equipment 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****Personal Precautions, Protective equipment and Emergency procedures**

- For Emergency responders** : Avoid raising and breathing dust and provide adequate ventilation.  
As condition warrant, wear a NIOSH approved self-contained breathing apparatus, or respirator, and appropriate personal protection (rubber boots, safety goggles, and heavy rubber gloves).
- Environmental Precautions** : Place waste in an appropriately labeled, sealed container for disposal. Care should be taken to avoid environmental release.  
Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
- Methods and Materials for Containment and cleaning up**
- Spill** : Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Avoid dust generation. Do not dry sweep. Vacuum dust with equipment fitted with a HEPA filter and place in a closed, labeled waste container. Dispose of via a licensed waste disposal contractor.  
**Note:** See Section 1 for emergency contact information and Section 13 for waste disposal.

**SECTION 7: HANDLING AND STORAGE****Precautions for safe Handling**

**Protective measures** : Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Do not get in eyes or on skin or clothing. Do not ingest. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container. Put on appropriate personal protective equipment (See Section 8).

**Advise on general occupational hygiene** : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking.

[See also Section 8 for additional information on hygiene measures.](#)

Remove contaminated clothing and protective equipment before entering eating areas.

**Conditions for safe storage, including any incompatibilities** : Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from Incompatible materials (see Section 10) and food and drink. Keep container Tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid Environmental contamination

**Recommended Storage Method** : Glass Container  
Polyethylene or polypropylene container  
Check all container are clearly labelled and free from leaks.

**Storage Requirements** : Observe manufacture's storing and handling recommendations.

**SECTION 8: EXPOSURE CONTROLS/ PERSONAL PROTECTION****CONTROL PARAMETERS**

**Occupational exposure limits** :

**EXPOSURE LIMITS**

COMPONENT	OSHA-PEL	ACGIH-TLV	AIHA WEEL	EEL
Chlorthalidone	8-hr TWA: Not Established	8-hr TWA: Not Established	8-hr TWA: Not Established	8-hr TWA: Not Established

Notes: OSHA PEL: US Occupational Safety and Health Administration – Permissible Exposure Limit  
ACGIH TLV: American Conference of Governmental Industrial Hygienists – Threshold Limit Value.  
AIHA WEEL: Workplace Environmental Exposure Level  
EEL: Employee Exposure Limit.  
TWA: 8-hour Time Weighted Average

**Appropriate engineering controls** : Good general ventilation should be sufficient to control worker exposure to airborne contaminants

**Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation

**SECTION 8: EXPOSURE CONTROLS/ PERSONAL PROTECTION****Individual protection measures**

**Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially Contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

**Personal protection****Eye/Face/Skin/Hand protection**

: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side- shields.

**Skin protection****Hand protection**

: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk Assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove Manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

**Body protection**

: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

**Other skin protection**

: Appropriate footwear and any additional skin protection measures should be selected Based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

**Respiratory protection**

: Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES****APPEARANCE****Physical State**

: Solid, round shaped, flat face, Compressed Tablet

**Color**

: White to off white



**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

<b>Odor</b>	: Odorless
<b>Odor threshold</b>	: Not Determined
<b>pH</b>	: Not Determined
<b>Melting point</b>	: 239 °C (Drug bank) 218 - 264 °C (HMDB)
<b>Boiling point</b>	: Not Determined
<b>Flash Point</b>	: It is probably combustible. (NTP, 1992)
<b>Evaporation Rate</b>	: Not Determined
<b>Flammability (solid, gas)</b>	: Not Determined
<b>Lower and Upper Explosive (flammable) Limits</b>	: Not Determined
<b>Vapor pressure</b>	: Not Determined
<b>Vapor density</b>	: >1 (Air =1) <1 mg/mL (Water = 1)
<b>Relative density</b>	: 1.6±0.1 g/cm <sup>3</sup>
<b>Solubility</b>	: 120 mg/L (at 20 °C) (MERCK INDEX (1996)) Chlorthalidone is practically insoluble in water, in ether and in chloroform; soluble in methanol; slightly soluble in alcohol. (HSDB) 5.28e-02 g/L (HMDB)
<b>Partition coefficient: n-octanol/water</b>	: 0.85 (Drug bank) log K <sub>o/w</sub> = 0.85 (HSDB) 1.3 (HMDB)
<b>Auto-ignition temperature</b>	: Not Determined
<b>Decomposition temperature</b>	: 428°F
<b>Viscosity</b>	: Not Applicable

**SECTION 10: STABILITY AND REACTIVITY**

<b>Reactivity</b>	: Sensitive to light. Darkens on exposure to light.
<b>Corrosively</b>	: Non-corrosive in presence of glass.



**SECTION 10: STABILITY AND REACTIVITY**

- Chemical stability** : Stable under recommended temperature & pressure.
- Possibility of hazardous reactions** : Under normal conditions of storage and use, hazardous reactions will not occur
- Conditions to avoid** : Dust generation & heat
- Incompatible materials** : Reactive or incompatible with the following materials:  
Strong oxidizing materials.
- Hazardous decomposition products** : Hazardous decomposition products formed under fire conditions. –  
Carbon oxides, Nitrogen oxides (NO<sub>x</sub>), Hydrogen chloride gas  
Carbon oxide, sulfur oxide ( SO<sub>x</sub>)  
Other decomposition products - No data available  
In the event of fire: see section 5

**SECTION 11: TOXICOLOGICAL INFORMATION****Information on toxicological effects**

- Acute toxicity** : Inflammation of the eyes is characterized by redness, watering, and itching.  
Skin inflammation is characterized by itching, scaling, reddening, or occasionally, blistering,
- Chronic toxicity:** : Chlorthalidone investigated as a reproductive effector. (RTECS)
- Sensitization** : Skin & Eyes  
Extracted data is specified from RTECS- Register of toxic effects of chemical substance.

Product/ingredient name	Result	Species	Dose	Exposure
Chlorthalidone	Oral LD50	Rat	>5000 mg/kg	Nil report
	Oral LD50	Mouse	>5000 mg/kg	Nil report
	Oral LD50	Rabbit	>5000 mg/kg	Nil report
	Oral LD50	G.pig	>5000 mg/kg	Nil report

**Carcinogenicity Classification**

Product/ingredient name	OSHA	IARC	NTP	ACGIH
Chlorthalidone	Hazard communication Standard 2012	Not listed	Classified 3 (Equivocal evidence)	Not listed

**Specific target organ toxicity (single exposure)** : Skin

**Specific target organ toxicity (repeated exposure)** : Inhalation, eye contact, Skin contact, ingestion.

**SECTION 11: TOXICOLOGICAL INFORMATION**

- Aspiration hazard** : There is no data available.
- Information on the likely routes of exposure** : Dermal contact. Eye contact. Inhalation. Ingestion.
- Symptom's related to the Physical, Chemical and Toxicological Characteristics** : Skin contact may result in inflammation characterized by itching, scaling, reddening, blistering, pain or dryness. Eye contact may result in redness, pain or severe eye damage. Inhalation may cause irritation of the lungs and respiratory system.  
Overexposure may result in serious illness or death.

**SECTION 12: ECOLOGICAL INFORMATION**

- Toxicity** : Avoid release into the environment.  
Runoff from fire control or dilution water may cause pollution.
- Persistence and degradability** : High  
Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.
- Bio accumulative potential** : Low
- Mobility in soil /water partition coefficient (K<sub>OC</sub>)** : Intermediate
- Other adverse effects** : May affect genetic material (mutagenic) May cause cancer based on animal test data. Equivocal tumorigenic agent by RTECS criteria.  
May cause adverse reproductive effects and birth defects (teratogenic)
- Result of PBT & vPvB assessment** : PBT & vPvB assessment is not available as chemical assessment is not required.

**SECTION 13: DISPOSAL CONSIDERATIONS**

- Waste treatment Methods** : Dispose of waste in accordance with all federal, state and local regulation.
- Contaminated packing** : Empty containers should be taken to an approved waste handling site for recycling or disposal.

**SECTION 14: TRANSPORT INFORMATION**

- UN number** : ADR/RID:- Not dangerous goods  
IMDG:- Not dangerous goods  
IATA:- Not dangerous goods

**SECTION 14: TRANSPORT INFORMATION**

<b>UN proper shipping name</b>	: ADR/RID:- Not dangerous goods IMDG:- Not dangerous goods IATA:- Not dangerous goods
<b>Transport hazard class(es)</b>	: ADR/RID: - Not dangerous goods IMDG: - Not dangerous goods IATA: - Not dangerous goods
<b>Packaging group</b>	: ADR/RID:- Not dangerous goods IMDG:- Not dangerous goods IATA: - Not dangerous goods
<b>Environmental hazards</b>	: ADR/RID:- No IMDG:- Marine pollutant: no IATA:- No
<b>Special precautions for user</b>	: Not dangerous goods
<b>AERG</b>	: Not dangerous goods
<b>Special precautions for user</b>	: <b>Transport within user's premises:</b> Always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.
<b>Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code</b>	: No data available

**SECTION 15: REGULATORY INFORMATION**

<b>U.S. Federal regulations</b>	: <b>TSCA 8(a) CDR Exempt/Partial exemption:</b> Not listed <b>United States inventory (TSCA 8b):</b> Not listed
<b>Composition/information on ingredients</b>	: No products were found.
<b>Regulatory Information Statement:</b>	: This SDS was prepared in accordance with 29 CFR 1910.1200 and Regulation (EC)No.1272/2008
<b><u>EPA SARA (Superfund Amendments and Reauthorization Act of 1986) Lists</u></b>	

CAS #	Hazardous Components (Chemical Name)	S. 302 (EHS)	S. 304 RQ	S. 313 (TRI)
77-36-1	Chlorthalidone	Not listed	Not listed	No listed
CAS #	Hazardous Components (Chemical Name)	Other US EPA or State Lists		
77-36-1	Chlorthalidone	CAA HAP,ODC: No; CWA NPDES: No; TSCA: No ; CA PROP.65: No		

<b>California Proposition 65 Warnings</b>	: California prop. 65: This product contains the following ingredients for which the State of California has found to cause cancer which would require a warning under the statute: No products were found.
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**SECTION 15: REGULATORY INFORMATION****Other Regulations**

California prop. 65: This product contains the following ingredients for which the State of California has found to cause birth defects which would require a warning under the statute: No products were found.

OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200).

Canada: Listed on Canadian Domestic Substance List (DSL).

China: Not listed on National Inventory.

Japan: Listed on National Inventory (ENCS).

Korea: Not listed on National Inventory (KECI).

Philippines: Not listed on National Inventory (PICCS).

Australia: Listed on AICS.

**Other Classifications**

WHMIS (Canada) CLASS D-1B: Material causing immediate and serious toxic effects (TOXIC).

**SECTION 16: OTHER INFORMATION****Full text of H-Statements referred to under sections 2 and 3.**

- H315** : Causes skin irritation.  
**H319** Causes serious eye irritation.  
**H360** May damage fertility or the unborn child.  
**H335** May cause respiratory irritation.

**Abbreviations and Acronyms**

- : CAS – Chemical Abstract Service;  
 GHS – Global Harmonized System;  
 OSHA PEL – Occupational Safety & Health Administration Permissible Exposure Limits;  
 TWA – Time Weighted Average;  
 AIHA WEEL – American Industrial Hygiene Association Workplace Environment Exposure Levels;  
 LD50 – Lethal Dose, 50%;  
 NTP – National Toxicology Program;  
 EPA – Environmental Protection Agency;  
 CERCLA – Comprehensive Environmental Response, Compensation, and Liability Act;  
 ACGIH - American Conference of Governmental Industrial Hygienists;  
 CFR: Code of Federal Regulations  
 CSA: Canadian Standards Association  
 EPA: Environmental Protection Agency  
 HMIS: Hazardous Materials Identification System  
 HSDB: Hazardous Substances Data Bank  
 IARC: International Agency for Research on Cancer  
 IUCLID: International Uniform Chemical Information Database  
 LC: Lethal Concentration  
 MA: Massachusetts  
 NFPA: National Fire Protection Association  
 NIOSH: National Institute of Occupational Safety and Health  
 NTP: National Toxicology Program

RCRA: Resource Conservation and Recovery Act

**Further information**

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Elysium Pharmaceutical Ltd and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product.