

MATERIAL SAFETY DATA SHEET

1. Chemical Product and Company Identification

Brand name & code : **CM 651**
Company : PT Crystal Anugerah Abadi
Green Sedayu Bizpark
Jl. Daan Mogot KM18, Blok DM9/31
Jakarta Barat - 11840

Telephone : 02122952523

2 COMPOSITION / INFORMATION ON INGREDIENTS :

Chemical description :

Component	CAS/EEC No.	% by wt.	Exposure guidelines/ Important Hazardous
5 -chloro 2 methyl 4 isothiazolene 3 one	26172-55-2	<1.6	EINECS no.2575007/ 2202396
2 methyl 4 isothiazolene 3 one	2682-20-4		corrosive

- Health/physical hazard Causes burns.
- Environmental hazards The product is not classified as dangerous for the environment.

3 Hazards Identification:

May cause sensitization by skin contact.

Causes burns.

Harmful by inhalation, in contact with skin and if swallowed.

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

Exposure controls

- Recommended engineering controls Adequate ventilation to maintain air contaminants below exposure limits.

Environmental exposure controls Prevent from entering in public sewers or the immediate environment.

4 FIRST AID MEASURES

General information

Remove soiled or soaked clothing immediately

After inhalation

When inhaled remove to fresh air and seek medical aid.

After contact with skin

In case of contact with skin wash off immediately with plenty of water
Cover wounds with sterile dressing

After contact with eyes

In case of contact with the eyes, rinse immediately for at least 15 minutes with plenty of water. Eye treatment by an Occulist

After ingestion

Do not induce vomiting. Seek medical advice immediately.
When swallowed, allow water to be drunk.

5 FIRE-FIGHTING MEASURES**Suitable extinguishing media**

extinguishing measures to suit surroundings foam
dry powder carbon dioxide water spray jet

Special hazards from the substance itself, its combustion products or from its vapours

Carbon monoxide (CO) Carbon dioxide (CO₂) Nitrogen oxides (NO_x) Sulphur oxides

Special protective equipment for firefighting

Use breathing apparatus. Wear full protective suit.

6. HANDLING AND STORAGE:**Handling Highly acidic**

Do not mix with acidic material. Avoid contact with skin and eyes.

Storage Keep dry. Store away from acids.

7. ACCIDENTAL RELEASE MEASURES :**Personal precautions**

Use personal protective clothing. Use respiratory protection if exposed to vapours/dust/aerosols.

Environmental precautions

Do not discharge into surface waters/groundwater.

Methods for cleaning up/taking up

Pump up larger quantities. Remove mechanically. Pick up rest with binding material (eg sawdust, sand, universal binder) Dispose of absorbed material in accordance with the regulations.

Advice on safe handling

Use only acid resistant equipment.

8 EXPOSURE CONTROLS/PERSONAL PROTECTION**Exposure controls**

- Recommended engineering controls A ventilation to maintain air contaminants below exposure limits.
- Respiratory protection In case of insufficient ventilation, use a breathing mask with filter type:

Exposure controls

- Hand protection Neoprene gloves.

- Eye protection Splash proof chemical goggles. Face shield.
- Skin protection Chemical resistant apron.
 - Environmental exposure controls Prevent from entering in public sewers or the immediate environment.

Requirements for storage rooms and vessels

Use containers made of Polyethylene.Storage rooms must be properly ventilated.

Further information on storage conditions

Keep container tightly closed Store at a temperature between 5 to 40 °C

9. PHYSICAL AND CHEMICAL PROPERTIES

General information

Appearance Liquid

Colour : Clear Pale Green Liquid

Important health, safety and environmental info

pH in aqueous solution : < 4

Flash point (Pensky/Martens) (°C) > 100

Density at 20°C (kg/m³ = 0.95 – 1.35

Solubility in water (% weight) Completely soluble

Relative vapour density (air=1) < 1

Evaporation rate (ether=1) < 1

10 STABILITY AND REACTIVITY

Hazardous reactions

Reactions with strong oxidising agents.

Hazardous decomposition products

Nitrous oxides (NO_x) Carbon monoxide and carbon dioxide,Sulphurous oxides (SO_x)

11.Toxicity Data

Acute oral toxicity : LD50 760 mg/kg (rat) approx

Acute inhalation toxicity : LC50 approx. 1.25 mg/l (4 h, rat)approx

The values mentioned are those of the active ingredient.

Acute dermal toxicity : LD50 :600mg/kg (rat) approx

Irritant effect on skin : corrosive (rabbit)

Irritant effect on eyes : corrosive (rabbit)

Sensitization : sensitizing

Mutagenicity : No mutagenicity according to various in vitro tests.
(estimated value)

Exposure hazard

- Inhalation Mists or aerosols cause irritation to upper respiratory tract.

- Skin contact Causes severe burns.

- Eye contact Causes severe burns.

- Ingestion Causes burns in mouth, throat and/or stomach

Ecotoxicity: Expected to be harmful to aquatic organisms

Environmental mobility – This preparation is water-soluble & is expected to remain primarily in water.

12 ECOLOGICAL INFORMATION

Behaviour in environmental compartments

Product can accumulate in organisms in favourable environment.

Fish toxicity : LC50 0.047 mg/l (96 h, rainbow trout)Theoretical info.

Method : Test result of active substance

Daphnia toxicity : 0.46 mg/l (24 h, Daphnia magna)

13 DISPOSAL CONSIDERATIONS

Product

In accordance with regulations for special waste, must be taken to a special waste disposal site

Uncleaned packaging

Contaminated packaging should be emptied as far as possible and after appropriate cleansing may be taken for reuse .Packaging that cannot be cleaned should be disposed of as product waste.

14 TRANSPORT INFORMATION

ADR

Proper shipping name: Corrosive liquid, toxic, n.o.s.

Class: 8

Packing group: II

UN no. UN 2922

Primary risk: 8

Secondary risk: 6.1

Hazard no. : 86

Remarks Shipment permitted

Hazard inducer(s): SOLUTION, CONTAINS -ISOTHIAZOLIN-3-ONE

Em S = F-A , S-B

15 REGULATORY INFORMATION

EEC labelling information - Symbol(s) Corrosive:C

Causes burns.Harmful by inhalation, in contact with skin and if swallowed.

May cause sensitization by skin contact., may cause long-term adverse effects in the aquatic environment.

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

After contact with skin, wash immediately with plenty of water.

Wear suitable protective clothing, gloves and eye/face protection.

In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).Avoid release to the environment. Refer to special instructions/Safety data sheets.

:16.Other information :-

Recommended use –Water treatment .use Harmful if swallowed.

Toxic by inhalation and in contact with skin.

Causes burns.

May cause sensitization by skin contact.

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

NOTICE :-

This information relates specifically to the product designated and may not be valid for the product when used in combination with any other materials or products or in a particular process. The information is, to the best of our knowledge and belief, accurate and reliable as of the date compiled. However, no representation, warranty or guarantee is made as to its accuracy, reliability or completeness. It is the user's responsibility to review this information, satisfy itself as to its suitability and completeness and pass on the information to its employees or customers in accordance with applicable federal, state or local hazard communications requirement. We do not accept responsibility for any loss or damage which may occur from the use of this information.
