

Safety Data Sheet

Australia

Section 1. Identification

Product name Cy[™]5.5 Monomaleimide, 5 mg

Catalogue Number PA15630

Chemical product name Cy5.5 (mono-maleimide)

Product type

Relevant identified uses of the substance or mixture and uses advised against

Identified uses Use in laboratories

Company details

Manufacturer Supplier Cytiva Cytiva Australia

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Section 2. Hazard(s) identification

Classification of the substance ACUTE TOXICITY (oral) - Category 3 or mixture

RESPIRATORY SENSITISATION - Category 1

SKIN SENSITISATION - Category 1

GHS label elements

Hazard pictograms





Signal word **DANGER**

Hazard statements Toxic if swallowed.

May cause allergy or asthma symptoms or breathing difficulties if inhaled.

May cause an allergic skin reaction.

Precautionary statements

Response

Prevention Wear protective gloves. In case of inadequate ventilation wear respiratory protection. Avoid

breathing dust. Do not eat, drink or smoke when using this product. Wash hands thoroughly after

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

IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. If experiencing respiratory symptoms: Call a POISON CENTER or physician. IF SWALLOWED: Immediately call a POISON CENTER or physician. Rinse mouth. IF ON SKIN: Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin

irritation or rash occurs: Get medical attention.

Storage Store locked up.

Disposal Dispose of contents and container in accordance with all local, regional, national and international

regulations

Supplemental label elements Not applicable.

Other hazards which do not result in classification

None known

Section 3. Composition and ingredient information

Substance/mixture Substance

Chemical identity Cy5.5 (mono-maleimide)

Other means of identification Not available.

CAS number/other identifiers

CAS number

Not available.

EC number Not available.

Ingredient name % (w/w) CAS number

Cy5.5 (mono-maleimide) 100 -

There are no additional 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 10 minutes. Get medical attention

if irritation occurs.

Inhalation Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected

that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. 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 necessary, call a poison center or physician. 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. In the event of any complaints or

symptoms, avoid further exposure.

Skin contact Wash with plenty of soap and water. Remove contaminated clothing and shoes. Wash

contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. In the event of any complaints or symptoms, avoid

further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Ingestion Get medical attention immediately. Call a poison center or physician. 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. 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, belt or waistband.

Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye contact No known significant effects or critical hazards.

Inhalation May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Skin contact May cause an allergic skin reaction.

Ingestion Toxic if swallowed.

Over-exposure signs/symptoms

Eye contact No specific data.

Inhalation Adverse symptoms may include the following:

wheezing and breathing difficulties

asthma

Skin contact Adverse symptoms may include the following:

irritation redness

Ingestion No specific data.

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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 No specific treatment.

Protection of first-aiders No action shall be taken involving any personal risk or without suitable training. If it is suspected

that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. 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. Firefighting measures

Extinguishing media

Suitable extinguishing media

Use an extinguishing agent suitable for the surrounding fire.

Unsuitable extinguishing

media

None known.

Specific hazards arising from

the chemical

No specific fire or explosion hazard.

Hazardous thermal decomposition products

Decomposition products may include the following materials: carbon dioxide carbon monoxide

nitrogen oxides sulfur oxides metal oxide/oxides

Special protective actions for

fire-fighters

Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire.

No action shall be taken involving any personal risk or without suitable training.

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 non-emergency personnel No action shall be tak

No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders

If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

Environmental precautions

Avoid dispersal of spilt 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 material for containment and cleaning up

Small spill

Move containers from spill area. Avoid dust generation. Do not dry sweep. Vacuum dust with equipment fitted with a HEPA filter and place in a closed, labeled waste container. Place spilled material in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor.

Large spill

Move containers from spill area. Approach the 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

Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitisation problems or asthma, allergies or chronic or recurrent respiratory disease 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. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. 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.

Advice 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. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

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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. Store locked up. 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 unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

Section 8. Exposure controls and personal protection

Control parameters

Occupational exposure limits

None.

Appropriate engineering

controls

Use only with adequate ventilation. If user operations generate dust, fumes, gas, vapour or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker

exposure to airborne contaminants below any recommended or statutory limits.

Environmental exposure

controls

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

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.

Eye/face 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 Based on the hazard and potential for exposure, select a respirator that meets the appropriate

standard or certification. Respirators must be used according to a respiratory protection program to

ensure proper fitting, training, and other important aspects of use.

Section 9. Physical and chemical properties

Appearance

Physical stateSolid.ColourBlue. [Dark]OdourOdourless.

Flash point [Product does not sustain combustion.]

Flammability (solid, gas)

Non-flammable in the presence of the following materials or conditions: open flames, sparks and

static discharge, heat, shocks and mechanical impacts, oxidizing materials, reducing materials,

combustible materials, organic materials, metals, acids, alkalis and moisture.

Solubility Easily soluble in the following materials: cold water and hot water.

Partition coefficient: n-octanol/

water

Not available

Decomposition temperatureNot available.Flow time (ISO 2431)Not available.Molecular weight1153.46 g/mole

Aerosol product

Flame duration Not applicable.

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Section 10. Stability and reactivity

Reactivity No specific test data related to reactivity available for this product or its ingredients.

Chemical stability The product is stable.

Possibility of hazardous

reactions

Under normal conditions of storage and use, hazardous reactions will not occur.

Conditions to avoid No specific data. Incompatible materials No specific data

Hazardous decomposition Under normal conditions of storage and use, hazardous decomposition products should not be

products produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Not available.

Irritation/Corrosion

Not available.

Sensitisation

Not available.

Mutagenicity

Not available.

Carcinogenicity

Not available.

Conclusion/Summary To the best of our knowledge, the toxicological properties of this substance have not been

thoroughly investigated.

Reproductive toxicity

Not available.

Teratogenicity

Not available.

Specific target organ toxicity (single exposure)

Not available

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

Information on likely routes of

exposure

Routes of entry anticipated: Oral, Dermal, Inhalation.

Potential acute health effects

Eye contact No known significant effects or critical hazards.

Inhalation May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Skin contact May cause an allergic skin reaction.

Ingestion Toxic if swallowed.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact No specific data.

Inhalation Adverse symptoms may include the following:

wheezing and breathing difficulties

asthma

Skin contact Adverse symptoms may include the following:

irritation redness

Ingestion No specific data.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

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Short term exposure

Potential immediate effects Not available.

Potential delayed effects Not available.

Long term exposure

Potential immediate effects Not available.

Potential delayed effects Not available.

Potential chronic health effects

Not available.

General Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.

CarcinogenicityNo known significant effects or critical hazards.MutagenicityNo known significant effects or critical hazards.TeratogenicityNo known significant effects or critical hazards.Developmental effectsNo known significant effects or critical hazards.Fertility effectsNo known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Product/ingredient name	Oral (mg/	Dermal	Inhalation	Inhalation	Inhalation
	kg)	(mg/kg)	(gases)	(vapours)	(dusts and
€y5.5 (mono-maleimide)	100	N/A	(ppm) N/A	(mg/l) N/A	mists) (mg/l) N/A

Section 12. Ecological information

Toxicity

Not available.

Persistence and degradability

Not available.

Bioaccumulative potential

Not available.

Mobility in soil

Soil/water partition coefficient (K Not available.

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Other adverse effects No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods

The generation of waste should be avoided or minimised wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

	ADG	ADR/RID	IMDG	IAIA
UN number	UN2811	UN2811	UN2811	UN2811
Proper shipping name	Toxic solid, organic, n.o.s. (Cy5.5 (mono-maleimide), solid)	Toxic solid, organic, n.o.s. (Cy5.5 (mono-maleimide), solid)		Toxic solid, organic, n.o.s. (Cy5.5 (mono-maleimide), solid)
Class	6.1	6.1	6.1	6.1
Label	TOXIC			

ADD/DID

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PGIIIIIIIIIIIIEnvironmental $\overline{\mathbb{N}}$ 0.No.No.No.

hazards

Additional - <u>Tunnel code</u> -

information

Special precautions for user Transport within user's premises: 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

Transport in bulk according to Annex II of Marnol and the IRC

Annex II of Marpol and the IBC Code

Not available.

Section 15. Regulatory information

Standard Uniform Schedule of Medicine and Poisons

Not regulated.

Model Work Health and Safety Regulations - Scheduled Substances

No listed substance

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed

Montreal Protocol (Annexes A, B, C, E)

Not listed

Stockholm Convention on Persistent Organic Pollutants

Not listed

Rotterdam Convention on Prior Informed Consent (PIC)

Not listed

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

Inventory list

Australia Not determined. Europe Not determined. **United States** Not determined. Canada inventory Not determined. China Not determined. Japan Not determined. Malaysia Not determined **New Zealand** Not determined.

Section 16. Any other relevant information

History

Date of printing12 May 2020Date of previous issue24 May 2017

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ADG = Australian Dangerous Goods

ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road

ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

IATA = International Air Transport Association

IBC = Intermediate Bulk Container

IMDG = International Maritime Dangerous Goods

LogPow = logarithm of the octanol/water partition coefficient

MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by

the Protocol of 1978. ("Marpol" = marine pollution)

N/A = Not available

SUSMP = Standard Uniform Schedule of Medicine and Poisons

UN = United Nations

Procedure used to derive the classification

Classification Justification

Validation date 9 October 2019

ACUTE TOXICITY (oral) - Category 3 RESPIRATORY SENSITISATION - Category 1 SKIN SENSITISATION - Category 1 Expert judgment Expert judgment Expert judgment



Indicates information that has changed from previously issued version.

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

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