

MATERIAL SAFETY DATA SHEET

Version 1.0, Feb 2014

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY UNDERTAKING

1.1 Product identifiers

Product Name: Purmorphamine

Catalog Number: SM30 CAS Number: 483367-10-8

IUPAC Name: 2-(1-Naphthoxy)-6-(4-morpholinoanilino)-9-cyclohexylpurine

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

Identified Uses: Laboratory chemicals, Manufacture of substances

1.3 Details of the supplier of the safety data sheet

Company: Cell Guidance Systems

Moneta Building, Babraham Research Campus,

Cambridge CB22 3AT, UK

 Web:
 www.cellgs.com

 Email
 tech@cellgs.com

 Telephone:
 + 44 (0)1223 850186

1.4 Emergency Telephone Emergency Tel: + 44 (0) 1223 850186 (09.00 - 17.00 GMT)

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

GHS08 health hazard



Muta. 2 H341 Suspected of causing genetic defects.

GHS07



Acute Tox. 4 H302 Harmful if swallowed.

Classification according to Directive 67/548/EEC or Directive 1999/45/EC:

Xn; Harmful



R22-68: Harmful if swallowed. Possible risk of irreversible effects.

Information concerning particular hazards for human and environment: Not applicable.

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008:

The substance is classified and labelled according to the CLP regulation.

Hazard pictograms: GHS07 GHS08





Signal word: Warning **Hazard statements**:

H302 Harmful if swallowed.

H341 Suspected of causing genetic defects.

Precautionary statements

P281 Use personal protective equipment as required.

P264 Wash thoroughly after handling.

P301+P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.

P308+P313 IF exposed or concerned: Get medical advice/attention.

P405 Store locked up.

P501 Dispose of contents/container in accordance with local/regional/national/international

regulations.

2.3 Other hazards

Results of PBT and vPvB assessment

PBT: Not applicable. vPvB: Not applicable.

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

 $\begin{array}{lll} \mbox{Product Name:} & \mbox{Purmorphamine} \\ \mbox{Formula:} & \mbox{C_{31}H}_{32}$N}_6$O}_2 \\ \mbox{Molecular Weight:} & \mbox{520.6} \\ \mbox{CAS Number:} & \mbox{483367-10-8} \end{array}$

4. FIRST AID MEASURES

4.1 Description of first aid measures

General advice. Consult a doctor and show this safety data sheet.

If inhaled. Remove to fresh air and monitor breathing. If breathing becomes difficult, give oxygen. If breathing stops, give artificial

respiration. Consult a doctor.

In case of skin contact. Immediately wash skin with copious amounts of soap and water for at least 15 minutes. Remove contaminated clothing

and shoes and wash before reuse. Consult a doctor.

In case of eye contact. Flush with copious amounts of water for at least 15 minutes. Consult a doctor.

If swallowed.

Rinse mouth with water. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Consult a doctor.

4.2 Most important symptoms and effects, both acute and delayed

To the best of our knowledge, the chemical, physical and toxicological properties have not been thoroughly investigated.

4.3 Indication of immediate medical attention and special treatment needed

Show this safety data sheet to the doctor in attendance. Immediate medical attention is required.

5. FIRE-FIGHTING MEASURES

5.1	Suitable extinguishing media	Use water spray,	, alcohol-resistant foar	n, dry	/ chemical	or carbon dioxide.
J. I	Suitable extiliguishing media	Use water spray,	, alconor-resistant ioai	II, UI y	CHEIIIICAI	or carbon dioxid

5.2 Special hazards arising from the substance or mixture In combustion, may emit toxic fumes.

5.3 Precautions for fire-fightersWear suitable protective clothing to prevent contact with skin and eyes and self-contained breathing apparatus.

6. ACCIDENTIAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Do not take action without suitable protective clothing - see section 8 of SDS. Evacuate personnel to safe areas. Ensure ventilation. Avoid breathing vapors, mist, dust or gas.

6.2 Environmental precautions

Do not let product enter drains.

6.3 Methods and materials for containment and cleaning up

Cover spillage with suitable absorbent material. Using non-spark tools, sweep up material and place in an appropriate container. Decontaminate spill site with 10% caustic solution and ventilate area until after disposal is complete. Hold all material for appropriate disposal as described under section 13 of SDS.

6.4 Reference to other sections

For required PPE see section 8. For disposal see section 13.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Use in a chemical fume hood, with air supplied by an independent system. Avoid inhalation, contact with eyes, skin and clothing. Avoid the formation of dust and aerosols. Use in a well-ventilated area. Keep away from sources of ignition. Avoid prolonged or repeated exposure.

7.2 Conditions for safe storage, including any incompatibilities.

Store in cool, well-ventilated area. Keep away from direct sunlight. Keep container tightly sealed until ready for use. Recommended storage temperature: Store at -20°C

7.3 Specific end uses

Use in a laboratory fume hood where possible. Refer to employer's COSHH risk assessment.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Components with workplace control parameters

Contains no substances with occupational exposure limit values.

8.2 Exposure controls

Appropriate engineering controls

Use in a fume hood where applicable. Ensure all engineering measures described

under section 7 of SDS are in place.

Ensure laboratory is equipped with a safety shower and eye wash station.

Personal protective equipment

Eye/face protection Use appropriate safety glasses.

Skin protection Use appropriate chemical resistant gloves (minimum requirement use standard BS EN

374:2003). Gloves should be inspected before use. Wash and dry hands thoroughly

after handling.

Body protection Wear appropriate protective clothing.

Respiratory protection If risk assessment indicates necessary, use a suitable respirator.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance Off-white to beige solid Vapor pressure No data available Odor No data available Vapor density No data available Odor threshold No data available Relative density No data available No data available pH No data available

Solubility(ies) Soluble in DMSO (10mM) Melting / freezing point No data available Partition coefficient No data available Boiling point / range No data available Auto-ignition temperature No data available No data available Flash point Decomposition temperature No data available No data available Evaporation rate Viscosity No data available Flammability (solid, gas) No data available Explosive properties No data available Upper / lower flammability or explosive limits No data available Oxidising properties No data available

9.2 Other safety information

No data available

10. STABILITY AND REACTIVITY

10.1 Reactivity Stable under recommended transport or storage conditions.

10.2 Chemical stability Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions Hazardous reactions will not occur under normal transport or storage conditions. Decomposition

may occur on exposure to conditions or materials listed below.

10.4 Conditions to avoid Heat, moisture.

10.5 Incompatible materials Strong acids/alkalis, strong oxidising/reducing agents.

10.6 Hazardous decomposition products In combustion may emit toxic fumes. No known decomposition information.

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute Toxicity No data available

Skin corrosion/irritation Classification criteria are not met based on available data Serious eye damage/irritation Classification criteria are not met based on available data Respiratory or skin sensitization Classification criteria are not met based on available data Germ cell mutagenicity Classification criteria are not met based on available data Classification criteria are not met based on available data Carcinogenicity Classification criteria are not met based on available data Reproductive toxicity Specific target organ toxicity - single exposure Classification criteria are not met based on available data Specific target organ toxicity - repeated exposure Classification criteria are not met based on available data Aspiration hazard Classification criteria are not met based on available data

Symptoms / Routes of exposure

Inhalation: There may be irritation of the throat with a feeling of tightness in the chest.

Ingestion: There may be irritation of the throat.

Skin: There may be mild irritation at the site of contact.

Eyes: There may be irritation and redness.

Delayed / Immediate Effects: No known symptoms.

Additional Information RTECS No: Not available

Exposure may cause irritation to eyes, mucous membranes, upper respiratory tract and skin

To the best of our knowledge, the chemical, physical and toxicological properties have not been fully investigated.

12. ECOLOGICAL INFORMATION

12.1 Toxicity No data available
12.2 Persistence and degradability No data available
12.3 Bioaccumlative potential No data available
12.4 Mobility in soil No data available
12.5 Results of PBT and vPvB assessment No data available

12.6 Other adverse effectsMay be harmful to the aquatic environment.

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product Transfer to a suitable container and arrange for collection by specialized disposal company in accordance

with National legislation.

Contaminated packaging

Dispose of in a regulated landfill site or other method for hazardous or toxic wastes in accordance with National legislation.

14. TRANSPORT INFORMATION

Classified according to the criteria of the UN Model Regulations as reflected in the IMDG Code, ADR, RID and IATA.

14.1 UN-Number Does not meet the criteria for classification as hazardous for transport. 14.2 UN proper shipping name Does not meet the criteria for classification as hazardous for transport. 14.3 Transport hazard class(es) Does not meet the criteria for classification as hazardous for transport. 14.4 Packaging group Does not meet the criteria for classification as hazardous for transport.

14.5 Environmental hazards This product is not classified as environmentally hazardous according to the UN Model Regulations, nor a

marine pollutant according to the IMDG Code.

No data available 14.6 Special precautions for users

15. REGULATORY INFORMATION

This safety datasheet complies with the requirements of Regulation (EC) No. 453/2010.

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

15.2 Chemical safety assessment

No data available

A Chemical Safety Assessment has not been made for this product.

16. OTHER INFORMATION

Copyright 2013 Cell Guidance Systems. This company shall not be held liable for any damage resulting from handling or from contact with the above product. This material must only be handled by suitably qualified experienced scientists in appropriately equipped and authorized facilities. The above information is believed to be correct but does not purport to be all inclusive and should be used as a guide only for experienced personnel. Always consult your safety advisor and follow appropriate local and national safety legislature. The absence of warning must not, under any circumstance, be taken to mean that no hazard exists.

End of safety data sheet