

# Dy-Mark Engineering Chalk Dy-Mark

Chemwatch: 4783-99 Version No: 8.2

Safety Data Sheet according to WHS Regulations (Hazardous Chemicals) Amendment 2020 and ADG requirements

# Chemwatch Hazard Alert Code: 2

Issue Date: **06/12/2022** Print Date: **13/12/2022** S.GHS.AUS.EN.E

# SECTION 1 Identification of the substance / mixture and of the company / undertaking

#### **Product Identifier**

Product name	Dy-Mark Engineering Chalk
Chemical Name	Not Applicable
Synonyms	12051111 White, 12051112 White
Chemical formula	Not Applicable
Other means of identification	Not Available

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

Relevant identified uses	Used for marking.
Relevant Identified uses	Use according to manufacturer's directions.

#### Details of the manufacturer or supplier of the safety data sheet

Registered company name	Dy-Mark			
Address	89 Formation Street Wacol QLD 4076 Australia			
Telephone	+61 7 3327 3004			
Fax	+61 7 3327 3009			
Website	http://www.dymark.com.au			
Email	info@dymark.com.au			

#### **Emergency telephone number**

Association / Organisation	Dy-Mark
Emergency telephone numbers	+61 7 3327 3099
Other emergency telephone numbers	Not Available

#### **SECTION 2 Hazards identification**

# Classification of the substance or mixture

# HAZARDOUS CHEMICAL. NON-DANGEROUS GOODS. According to the WHS Regulations and the ADG Code.

# Chemwatch Hazard Ratings

	Min	Max	
Flammability	0		
Toxicity	2		0 = Minimum
Body Contact	2		1 = Low
Reactivity	0		2 = Moderate
Chronic	0		3 = High 4 = Extreme

Poisons Schedule	Not Applicable
Classification [1]	Acute Toxicity (Inhalation) Category 4, Specific Target Organ Toxicity - Single Exposure (Respiratory Tract Irritation) Category 3
Legend:	1. Classified by Chemwatch; 2. Classification drawn from HCIS; 3. Classification drawn from Regulation (EU) No 1272/2008 - Annex VI

# Label elements

Hazard pictogram(s)



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Signal word	Warning
Hazard statement(s)	
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
Precautionary statement(s) Pre	evention
P271	Use only outdoors or in a well-ventilated area.
P261	Avoid breathing dust/fumes.
Precautionary statement(s) Re	sponse
P312	Call a POISON CENTER/doctor/physician/first aider/if you feel unwell.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
Precautionary statement(s) Sto	prage
P405	Store locked up.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
Precautionary statement(s) Dis	sposal
P501	Dispose of contents/container to authorised hazardous or special waste collection point in accordance with any local regulation.

# **SECTION 3 Composition / information on ingredients**

#### Substances

See section below for composition of Mixtures

#### Mixtures

CAS No	%[weight]	Name
14807-96-6	>60	Engineer Chalk
Legend:	Classified by Chemwatch; 2. Classification drawn from HCIS Classification drawn from C&L * EU IOELVs available	; 3. Classification drawn from Regulation (EU) No 1272/2008 - Annex VI; 4.

# **SECTION 4 First aid measures**

# Description of first aid measures

Eye Contact	If this product comes in contact with eyes:  • Wash out immediately with water.  • If irritation continues, seek medical attention.  • Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.  • Generally not applicable.
Skin Contact	If skin or hair contact occurs:  Flush skin and hair with running water (and soap if available).  Seek medical attention in event of irritation. Generally not applicable.
Inhalation	<ul> <li>If fumes or combustion products are inhaled remove from contaminated area.</li> <li>Lay patient down. Keep warm and rested.</li> <li>Prostheses such as false teeth, which may block airway, should be removed, where possible, prior to initiating first aid procedures.</li> <li>Apply artificial respiration if not breathing, preferably with a demand valve resuscitator, bag-valve mask device, or pocket mask as trained. Perform CPR if necessary.</li> <li>Transport to hospital, or doctor, without delay.</li> <li>Generally not applicable.</li> </ul>
Ingestion	► Generally not applicable.

# Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

# **SECTION 5 Firefighting measures**

#### **Extinguishing media**

- ▶ There is no restriction on the type of extinguisher which may be used.
- ► Use extinguishing media suitable for surrounding area.

# Special hazards arising from the substrate or mixture

Fire Incompatibility None known.

# Advice for firefighters

Fire Fighting

- ▶ Alert Fire Brigade and tell them location and nature of hazard.
- Wear breathing apparatus plus protective gloves in the event of a fire.

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	<ul> <li>Use fire fighting procedures suitable for surrounding area.</li> <li>DO NOT approach containers suspected to be hot.</li> <li>Cool fire exposed containers with water spray from a protected location.</li> <li>If safe to do so, remove containers from path of fire.</li> <li>Equipment should be thoroughly decontaminated after use.</li> <li>Slight hazard when exposed to heat, flame and oxidisers.</li> </ul>
Fire/Explosion Hazard	Articles and manufactured articles may constitute a fire hazard where polymers form their outer layers or where combustible packaging remains in place.  Certain substances, found throughout their construction, may degrade or become volatile when heated to high temperatures. This may create a secondary hazard.  Combustion products include: silicon dioxide (SiO2)  May emit poisonous fumes.  May emit corrosive fumes.
HAZCHEM	Not Applicable

# **SECTION 6 Accidental release measures**

#### Personal precautions, protective equipment and emergency procedures

# **Environmental precautions**

See section 12

Methods and material for conta	ainment and cleaning up
Minor Spills	<ul> <li>Clean up all spills immediately.</li> <li>Secure load if safe to do so.</li> <li>Bundle/collect recoverable product.</li> <li>Collect remaining material in containers with covers for disposal.</li> </ul>
Major Spills	<ul> <li>Clear area of personnel and move upwind.</li> <li>Alert Fire Brigade and tell them location and nature of hazard.</li> <li>Wear breathing apparatus plus protective gloves.</li> <li>Prevent, by any means available, spillage from entering drains or water course.</li> <li>Stop leak if safe to do so.</li> <li>Contain spill with sand, earth or vermiculite.</li> <li>Collect recoverable product into labelled containers for recycling.</li> <li>Neutralise/decontaminate residue (see Section 13 for specific agent).</li> <li>Collect solid residues and seal in labelled drums for disposal.</li> <li>Wash area and prevent runoff into drains.</li> <li>After clean up operations, decontaminate and launder all protective clothing and equipment before storing and re-using.</li> <li>If contamination of drains or waterways occurs, advise emergency services.</li> <li>Clean up all spills immediately.</li> <li>Wear protective clothing, safety glasses, dust mask, gloves.</li> <li>Secure load if safe to do so. Bundle/collect recoverable product.</li> <li>Use dry clean up procedures and avoid generating dust.</li> <li>Vacuum up (consider explosion-proof machines designed to be grounded during storage and use).</li> <li>Water may be used to prevent dusting.</li> <li>Collect remaining material in containers with covers for disposal.</li> <li>Flush spill area with water.</li> <li>Minor hazard.</li> <li>Clear area of personnel.</li> <li>Alert Fire Brigade and tell them location and nature of hazard.</li> <li>Control personal contact with the substance, by using protective equipment as required.</li> </ul>
	<ul> <li>Prevent spillage from entering drains or water ways.</li> <li>Contain spill with sand, earth or vermiculite.</li> <li>Collect recoverable product into labelled containers for recycling.</li> <li>Absorb remaining product with sand, earth or vermiculite and place in appropriate containers for disposal.</li> <li>Wash area and prevent runoff into drains or waterways.</li> <li>If contamination of drains or waterways occurs, advise emergency services.</li> </ul>

Personal Protective Equipment advice is contained in Section 8 of the SDS.

# **SECTION 7 Handling and storage**

# Precautions for safe handling

- Avoid all personal contact, including inhalation.
- ▶ Wear protective clothing when risk of exposure occurs.
- ▶ Use in a well-ventilated area.
- Prevent concentration in hollows and sumps.
- DO NOT enter confined spaces until atmosphere has been checked.
- ▶ DO NOT allow material to contact humans, exposed food or food utensils.
- Avoid contact with incompatible materials. Safe handling
  - When handling, **DO NOT** eat, drink or smoke.
  - Keep containers securely sealed when not in use.
  - Avoid physical damage to containers.
  - Always wash hands with soap and water after handling.
  - Work clothes should be laundered separately. Launder contaminated clothing before re-use.
  - Use good occupational work practice.
  - Observe manufacturer's storage and handling recommendations contained within this SDS.
  - Atmosphere should be regularly checked against established exposure standards to ensure safe working conditions are maintained.

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Other information

▶ Store away from incompatible materials

#### Conditions for safe storage, including any incompatibilities

Suitable container

Generally packaging as originally supplied with the article or manufactured item is sufficient to protect against physical hazards If repackaging is required ensure the article is intact and does not show signs of wear. As far as is practicably possible, reuse the original packaging or something providing a similar level of protection to both the article and the handler.

Storage incompatibility

None known















- Must not be stored together
- May be stored together with specific preventions
- May be stored together

Note: Depending on other risk factors, compatibility assessment based on the table above may not be relevant to storage situations, particularly where large volumes of dangerous goods are stored and handled. Reference should be made to the Safety Data Sheets for each substance or article and risks assessed accordingly.

#### **SECTION 8 Exposure controls / personal protection**

#### Control parameters

#### Occupational Exposure Limits (OEL)

#### INGREDIENT DATA

Source	Ingredient	Material name	TWA	STEL	Peak	Notes
Australia Exposure Standards	Engineer Chalk	Talc, (containing no asbestos fibres)	2.5 mg/m3	Not Available	Not Available	Not Available

#### **Emergency Limits**

1				
Ingredient	TEEL-1	TEEL-2		TEEL-3
Dy-Mark Engineering Chalk	Not Available	Not Available		Not Available
Ingredient	Original IDLH		Revised IDLH	
Engineer Chalk	1,000 mg/m3		Not Available	

#### **Exposure controls**

#### Appropriate engineering controls

Articles or manufactured items, in their original condition, generally don't require engineering controls during handling or in normal use. Exceptions may arise following extensive use and subsequent wear, during recycling or disposal operations where substances, found in the article, may be released to the environment.

# Personal protection









Eye and face protection

No special equipment required due to the physical form of the product.

- Safety glasses with side shields.
- Chemical goggles

#### Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. A written policy document, describing the wearing of lenses or restrictions on use, should be created for each workplace or task. This should include a review of lens absorption and adsorption for the class of chemicals in use and an account of injury experience. Medical and first-aid personnel should be trained in their removal and suitable equipment should be readily available. In the event of chemical exposure, begin eye irrigation immediately and remove contact lens as soon as practicable. Lens should be removed at the first signs of eye redness or irritation - lens should be removed in a clean environment only after workers have washed hands thoroughly. [CDC NIOSH Current Intelligence Bulletin 59], [AS/NZS 1336 or national equivalent

Hands/feet protection

See Hand protection below

Wear general protective gloves, eg. light weight rubber gloves.

**Body protection** 

Skin protection

See Other protection below

Other protection

- Overalls. P.V.C apron
- Barrier cream.
- Skin cleansing cream.
- ► Eye wash unit.

# Respiratory protection

Respiratory protection not normally required due to the physical form of the product.

# **SECTION 9 Physical and chemical properties**

# Information on basic physical and chemical properties

White odourless solid/powder shaped into a stick; not miscible with water. **Appearance** 

Physical state

Manufactured

Relative density (Water = 1)

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	1		1
Odour	Not Available	Partition coefficient n-octanol / water	Not Available
Odour threshold	Not Available	Auto-ignition temperature (°C)	Not Applicable
pH (as supplied)	Not Applicable	Decomposition temperature (°C)	Not Applicable
Melting point / freezing point (°C)	>900	Viscosity (cSt)	Not Applicable
Initial boiling point and boiling range (°C)	Not Applicable	Molecular weight (g/mol)	Not Applicable
Flash point (°C)	Not Applicable	Taste	Not Available
Evaporation rate	Not Applicable	Explosive properties	Not Available
Flammability	Not Applicable	Oxidising properties	Not Available
Upper Explosive Limit (%)	Not Applicable	Surface Tension (dyn/cm or mN/m)	Not Applicable
Lower Explosive Limit (%)	Not Applicable	Volatile Component (%vol)	Not Available
Vapour pressure (kPa)	Not Available	Gas group	Not Available
Solubility in water	Immiscible	pH as a solution (1%)	Not Available
Vapour density (Air = 1)	Not Applicable	VOC g/L	Not Available

# **SECTION 10 Stability and reactivity**

Reactivity	See section 7
Chemical stability	Product is considered stable and hazardous polymerisation will not occur.
Possibility of hazardous reactions	See section 7
Conditions to avoid	See section 7
Incompatible materials	See section 7
Hazardous decomposition products	See section 5

# **SECTION 11 Toxicological information**

Information or	toxicological	effects
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Inhaled	The material can cause respiratory irritation in some persons. The body's response to such irritation can cause further lung damage. Inhalation of dusts, generated by the material, during the course of normal handling, may be harmful.
Ingestion	The material is not thought to produce adverse health effects following ingestion (as classified by EC Directives using animal models).  Nevertheless, adverse systemic effects have been produced following exposure of animals by at least one other route and good hygiene practice requires that exposure be kept to a minimum.
Skin Contact	Skin contact is not thought to produce harmful health effects (as classified under EC Directives using animal models). Systemic harm, however, has been identified following exposure of animals by at least one other route and the material may still produce health damage following entry through wounds, lesions or abrasions.  Open cuts, abraded or irritated skin should not be exposed to this material
Eye	Although the material is not thought to be an irritant (as classified by EC Directives), direct contact with the eye may produce transient discomfort characterised by tearing or conjunctival redness (as with windburn).
Chronic	Long-term exposure to respiratory irritants may result in airways disease, involving difficulty breathing and related whole-body problems.  There has been some concern that this material can cause cancer or mutations but there is not enough data to make an assessment.  Substance accumulation, in the human body, may occur and may cause some concern following repeated or long-term occupational exposure.

Dy-Mark Engineering Chalk	TOXICITY	IRRITATION	
	Not Available	Not Available	
	TOXICITY	IRRITATION	
Facility on Olali	dermal (rat) LD50: >2000 mg/kg <sup>[1]</sup>	Eye: no adverse effect observed (not irritating) <sup>[1]</sup>	
Engineer Chalk	Inhalation(Rat) LC50: >2.1 mg/l4h <sup>[1]</sup>	Skin (human): 0.3 mg/3d-l mild	
	Oral (Rat) LD50; >5000 mg/kg <sup>[1]</sup>	Skin: no adverse effect observed (not irritating) <sup>[1]</sup>	
Legend:	1. Value obtained from Europe ECHA Registered Substances - Acute toxicity 2. Value obtained from manufacturer's SDS. Unless otherwise		

<b>ENGINEER</b>	CHALK

The substance is classified by IARC as Group 3:

NOT classifiable as to its carcinogenicity to humans.

Evidence of carcinogenicity may be inadequate or limited in animal testing.

specified data extracted from RTECS - Register of Toxic Effect of chemical Substances

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Asthma-like symptoms may continue for months or even years after exposure to the material ends. This may be due to a non-allergic condition known as reactive airways dysfunction syndrome (RADS) which can occur after exposure to high levels of highly irritating compound. Main criteria for diagnosing RADS include the absence of previous airways disease in a non-atopic individual, with sudden onset of persistent asthma-like symptoms within minutes to hours of a documented exposure to the irritant. Other criteria for diagnosis of RADS include a reversible airflow pattern on lung function tests, moderate to severe bronchial hyperreactivity on methacholine challenge testing, and the lack of minimal lymphocytic inflammation, without eosinophilia. RADS (or asthma) following an irritating inhalation is an infrequent disorder with rates related to the concentration of and duration of exposure to the irritating substance. On the other hand, industrial bronchitis is a disorder that occurs as a

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result of exposure due to high concentrations of irritating substance (often particles) and is completely reversible after exposure ceases. The disorder is characterized by difficulty breathing, cough and mucus production.

No significant acute toxicological data identified in literature search.

The overuse of talc in nursing infants has resulted in respiratory damage causing fluid in the lungs and lung inflammation which may lead to death within hours of inhalation.

Long-term exposure can also cause a variety of respiratory symptoms.

Acute Toxicity	<b>~</b>	Carcinogenicity	×
Skin Irritation/Corrosion	×	Reproductivity	×
Serious Eye Damage/Irritation	×	STOT - Single Exposure	✓
Respiratory or Skin sensitisation	×	STOT - Repeated Exposure	×
Mutagenicity	×	Aspiration Hazard	×

Leaend:

X - Data either not available or does not fill the criteria for classification - Data available to make classification

# **SECTION 12 Ecological information**

# Toxicity

	Endpoint	Test Duration (hr)	Species	Value	Source
Dy-Mark Engineering Chalk	Not Available	Not Available	Not Available	Not Available	Not Available
	Endpoint	Test Duration (hr)	Species	Value	Source
	NOEC(ECx)	720h	Algae or other aquatic plants	918.089mg/l	2
Engineer Chalk	LC50	96h	Fish	89581.016mg/l	2
	EC50	96h	Algae or other aquatic plants	7202.7mg/l	2
Legend:	Ecotox database	1. IUCLID Toxicity Data 2. Europe ECHA Register e - Aquatic Toxicity Data 5. ECETOC Aquatic Haz on Data 8. Vendor Data			

# DO NOT discharge into sewer or waterways.

# Persistence and degradability

Ingredient	Persistence: Water/Soil	Persistence: Air
	No Data available for all ingredients	No Data available for all ingredients

# Bioaccumulative potential

Ingredient	Bioaccumulation
	No Data available for all ingredients

# Mobility in soil

Ingredient	Mobility
	No Data available for all ingredients

# **SECTION 13 Disposal considerations**

# Waste treatment methods

Product / Packaging disposal

▶ Recycle wherever possible or consult manufacturer for recycling options.

Consult State Land Waste Management Authority for disposal.

DO NOT allow wash water from cleaning or process equipment to enter drains.

It may be necessary to collect all wash water for treatment before disposal.

In all cases disposal to sewer may be subject to local laws and regulations and these should be considered first.

▶ Where in doubt contact the responsible authority.

# **SECTION 14 Transport information**

# Labels Required

Marine Pollutant	NO	
HAZCHEM	Not Applicable	

Land transport (ADG): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

Air transport (ICAO-IATA / DGR): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

Sea transport (IMDG-Code / GGVSee): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

Transport in bulk according to Annex II of MARPOL and the IBC code

Not Applicable

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#### Transport in bulk in accordance with MARPOL Annex V and the IMSBC Code

Product name	Group
Engineer Chalk	Not Available

# Transport in bulk in accordance with the ICG Code

Product name	Ship Type
Engineer Chalk	Not Available

# **SECTION 15 Regulatory information**

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

# Engineer Chalk is found on the following regulatory lists

Australian Inventory of Industrial Chemicals (AIIC)
Chemical Footprint Project - Chemicals of High Concern List
International Agency for Research on Cancer (IARC) - Agents Classified by the IARC
Monographs

International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs - Group 2B: Possibly carcinogenic to humans International WHO List of Proposed Occupational Exposure Limit (OEL) Values for Manufactured Nanomaterials (MNMS)

# **National Inventory Status**

National Inventory	Status	
Australia - AIIC / Australia Non-Industrial Use	Yes	
Canada - DSL	Yes	
Canada - NDSL	No (Engineer Chalk)	
China - IECSC	Yes	
Europe - EINEC / ELINCS / NLP	Yes	
Japan - ENCS	Yes	
Korea - KECI	Yes	
New Zealand - NZIoC	Yes	
Philippines - PICCS	Yes	
USA - TSCA	Yes	
Taiwan - TCSI	Yes	
Mexico - INSQ	Yes	
Vietnam - NCI	Yes	
Russia - FBEPH	Yes	
Legend:	Yes = All CAS declared ingredients are on the inventory No = One or more of the CAS listed ingredients are not on the inventory. These ingredients may be exempt or will require registration.	

# **SECTION 16 Other information**

Revision Date	06/12/2022
Initial Date	15/06/2012

#### **SDS Version Summary**

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Version	Date of Update	Sections Updated				
8.1	01/11/2019	One-off system update. NOTE: This may or may not change the GHS classification				
8.2	06/12/2022	Supplier Information, Synonyms				

#### Other information

Classification of the preparation and its individual components has drawn on official and authoritative sources as well as independent review by the Chemwatch Classification committee using available literature references.

The SDS is a Hazard Communication tool and should be used to assist in the Risk Assessment. Many factors determine whether the reported Hazards are Risks in the workplace or other settings. Risks may be determined by reference to Exposures Scenarios. Scale of use, frequency of use and current or available engineering controls must be considered.

#### **Definitions and abbreviations**

PC-TWA: Permissible Concentration-Time Weighted Average

 ${\sf PC-STEL} : {\sf Permissible\ Concentration-Short\ Term\ Exposure\ Limit}$ 

IARC: International Agency for Research on Cancer

ACGIH: American Conference of Governmental Industrial Hygienists

STEL: Short Term Exposure Limit

TEEL: Temporary Emergency Exposure Limit $_{\circ}$ 

IDLH: Immediately Dangerous to Life or Health Concentrations

ES: Exposure Standard

OSF: Odour Safety Factor

NOAEL :No Observed Adverse Effect Level

LOAEL: Lowest Observed Adverse Effect Level

TLV: Threshold Limit Value

LOD: Limit Of Detection

OTV: Odour Threshold Value BCF: BioConcentration Factors

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BEI: Biological Exposure Index

AIIC: Australian Inventory of Industrial Chemicals

DSL: Domestic Substances List

NDSL: Non-Domestic Substances List

IECSC: Inventory of Existing Chemical Substance in China

EINECS: European INventory of Existing Commercial chemical Substances

ELINCS: European List of Notified Chemical Substances

NLP: No-Longer Polymers

ENCS: Existing and New Chemical Substances Inventory

KECI: Korea Existing Chemicals Inventory NZIoC: New Zealand Inventory of Chemicals

PICCS: Philippine Inventory of Chemicals and Chemical Substances

TSCA: Toxic Substances Control Act

TCSI: Taiwan Chemical Substance Inventory

INSQ: Inventario Nacional de Sustancias Químicas

NCI: National Chemical Inventory FBEPH: Russian Register of Potentially Hazardous Chemical and Biological Substances

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