

1. Identification of Substance & Company

Product

Product name	Keson Marking chalk, various colours
Other names	BLUE CHALK BOTTLE - 2.24Kg, GLO ORANGE CHALK BOTTLE - 2.24Kg RED CHALK BOTTLE - 2.24Kg WHITE CHALK BOTTLE - 2.24Kg BLUE CHALK BOTTLE - 113g RED CHALK BOTTLE - 113g WHITE CHALK BOTTLE - 113g BLUE CHALK BOTTLE - 228g BLACK CHALK BOTTLE - 228g GLO ORANGE CHALK BOTTLE - 228g RED CHALK BOTTLE - 228g WHITE CHALK BOTTLE - 228g ELLOW CHALK BOTTLE - 228g K1 CHALK REEL w 4oz BLUE CHALK COMBO PACK BLACK CHALK BOTTLE – 2.24Kg YELLOW CHALK BOTTLE – 2.24Kg BOLD GIANT CHALK LINE – 50m ALUMINIUM CHALK LINE REEL – 30m
Product code	KS105B, KS105GO, KS105R, KS105W, KS4B, KS4R, KS4W, KS8B, KS8BK, KS8GO, KS8R, KS8W, KS8Y, KSK1CB, KS105BK, KS105Y, KSG150BOLD, KSK1
HSNO approval	HSR002545
Approval description	Construction Products Carcinogenic Group Standard 2020
UN number	NA
Proper Shipping Name	NA
DG class	NA
Packaging group	NA
Hazchem code	NA
Uses	Marking chalk for construction

Company Details

Company	Toolware Sales LTD
Address	3 Stonedon Drive East Tamaki Auckland 2013
Telephone	+64 9 579 8080
Website	www.toolware.co.nz

Emergency Telephone Number: 0800 764 766 (0800 POISON)

2. Hazard Identification

Approval

This product has been approved under the Hazardous Substances and New Organisms Act (HSNO, Approval HSR002545, Construction Products Carcinogenic Group Standard 2020). The substance has been classified as hazardous according to the criteria in the Hazardous substances (Hazard Classification) Notice 2020.

GHS 7 Classes

Eye irritation category 2
Carcinogen category 1*
STOT repeated exposure category 1*

Hazard Statements

H320 - Causes eye irritation.
H350 - May cause cancer if inhaled.
H372 - Causes damage to organs through prolonged or repeated exposure.

***This classification applies to any respirable crystalline silica dust present in the chalk.**

SYMBOLS

DANGER



Other Classifications

There are no other classifications that are known to apply.

Precautionary Statements

Prevention

P103 - Read label before use.
P264 - Wash hands thoroughly after handling.
P201 - Obtain special instructions before use.
P202 - Do not handle until all safety precautions have been read and understood.
P260 - Do not breathe dust.
P270 - Do not eat, drink or smoke when using this product.
P280 - Wear protective eye protection.

Response

P281 - Use personal protective equipment as required.
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313 - If eye irritation persists: Get medical advice/attention.
P308+P313 - IF exposed or concerned: Get medical advice/ attention.

Storage

P405 - Store locked up.

Disposal

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

3. Composition / Information on Ingredients

Component	CAS/ Identification	Conc (%)
Calcium carbonate	471-34-1	85-10%
Crystalline Silica	14808-60-7	0.1-1.0%
Pigments – various colours	mixture	0-15%

This is a commercial product whose exact ratio of components may vary. Trace quantities of impurities are also likely.

4. First Aid

General Information

If medical advice is needed, have product container or label at hand. You should call the National Poisons Centre if you feel that you may have been harmed or irritated by this product. The number is 0800 764 766 (0800 POISON) (24 hr emergency service). IF exposed or concerned: Get medical advice/ attention. If shortness of breath or other health concerns develop after exposure to dust from the product, seek medical attention.

Recommended first aid facilities

Ready access to running water is recommended.

Exposure

Swallowed Eye contact

Do NOT induce vomiting. Give a glass of water to drink. Contact a doctor.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Apply continuous irrigation with water for at least 15 minutes holding eyelids apart. If eye irritation persists: Get medical advice.

Skin contact Inhaled

This product is non-irritating to skin. No further measures should be required.
IF INHALED: Dusts may cause irritation. If experiencing irritation, remove to fresh air. Drink water to clear throat. If shortness of breath or wheezing develops, seek medical attention. Call a POISON CENTER or doctor/physician if you feel unwell.

Advice to Doctor

Treat symptomatically

5. Firefighting Measures

Fire and explosion hazards:	There are no specific risks for fire/explosion for this chemical. It is non-flammable.
Suitable extinguishing substances:	Carbon dioxide, extinguishing powder or water jet. Fight larger fires with water jet or alcohol resistant foam.
Unsuitable extinguishing substances:	Unknown.
Products of combustion:	Carbon dioxide, and if combustion is incomplete, carbon monoxide and smoke. Water. May form toxic mixtures in air and may accumulate in sumps, pits and other low-lying spaces, forming potentially explosive mixtures.
Protective equipment:	Self-contained breathing apparatus. Safety boots, non-flammable overalls, gloves, hat and eye protection.
Hazchem code:	NA

6. Accidental Release Measures

Containment	If greater than 1000kg is stored, secondary containment and emergency plans to manage any potential spills must be in place. In all cases design storage to prevent discharge to stormwater.
Emergency procedures	This product is not considered flammable or ecotoxic. The container size will general prevent a major spill. If a large spill (e.g. >100kg) does occur: Wear protective equipment to prevent skin, eye and respiratory exposure to dusts. Clear area of any unprotected personnel. Avoid creating dust. If appropriate, use a gentle water spray to wet material to minimise dust generation.
Clean-up method	If possible to wet the dust, wet and sweep up the solid. Dry sweeping should not be attempted. Vacuuming with an industrial vacuum outfitted with a high efficiency particulate filter is recommended.
Disposal	Collect recoverable material into labelled containers for recycling or salvage. This material may be suitable for approved landfill. Dispose of only in accord with all regulations. See section 14.
Precautions	Wear protective equipment to prevent eye contamination and the inhalation of dusts. Work up wind or increase ventilation.

7. Storage & Handling

Storage	Avoid storage near food and beverages. Avoid contact with incompatible substances as listed in Section 10. Store in a dry place.
Handling	Keep exposure to a minimum, and minimise the quantities kept in work areas. See section 8 with regard to personal protective equipment requirements. Avoid skin and eye contact and inhalation of vapour, mist or aerosols.

8. Exposure Controls / Personal Protective Equipment

Workplace Exposure Standards

A workplace exposure standard (WES) has not been established by WorkSafe NZ for this product. There is a general limit of 10mg/m³ for dusts and mists when limits have not otherwise been established.

NZ Workplace Exposure Stds	Ingredient	WES-TWA	WES-STEL
	Calcium carbonate	10mg/m ³	data unavailable
	Crystalline Silica	0.05mg/m ³ (respirable dust)	data unavailable

Engineering Controls

In industrial situations, it is expected that employee exposure to hazardous substances will be controlled to a level as far below the WES as practicable by applying the hierarchy of control required by the Health and Safety at Work Act (2015) and the Health and Safety at Work (General Risk and Workplace Management) Regulations 2016. Exposure can be reduced by process modification, use of local exhaust ventilation, capturing substances at the source, or other methods. If you believe air borne concentrations of mists, dusts or vapours are high, you are advised to modify processes or increase ventilation.

Personal Protective Equipment

Eyes	Avoid contact with eyes. Use safety glasses or goggles if irritant levels of dusts are present.
Skin	Avoid repeated or prolonged skin contact. Wear overalls, rubber boots and impervious gloves if concerned about irritation or dryness of the skin.
Respiratory	A respirator when airborne concentrations approach the WES (section 8). Use a respirator with a dust filter. If using a respirator, ensure that the cartridges are correct for the potential air contamination and are in good working order.



WES Additional Information

Not applicable

9. Physical & Chemical Properties

Appearance	Powder - various colours
Odour	no odour
Odour Threshold	no data
pH	8.5-9.5 (at 10% solids)
Freezing/melting point	no data
Boiling Point	no data
Flashpoint	no data
Flammability	no data
Upper & lower flammable limits	no data
Vapour pressure	no data
Vapour density	no data
Specific gravity/density	no data
Solubility	no data
Partition coefficient	no data
Auto-ignition temperature	no data
Decomposition temperature	no data
Viscosity	no data
Particle Characteristics	no data

10. Stability & Reactivity

Stability	Stable
Conditions to be avoided	Containers should be kept closed in order to avoid contamination. Avoid creation of dust during handling of marking chalk.
Incompatible groups	none known
Substance Specific Incompatibility	none known
Hazardous decomposition products	none known
Hazardous reactions	none known

11. Toxicological Information

Summary

IF SWALLOWED: No adverse effects expected.

IF IN EYES: Dust may be irritating to eyes.

IF ON SKIN: This product is not absorbed through the skin. Chalk may dry out the skin.

IF INHALED: Dusts may cause upper respiratory tract irritation, resulting in coughing and sneezing. Certain susceptible individuals may experience wheezing (spasms of the bronchial airways) upon inhaling dust.

CHRONIC EFFECTS: Long term exposure to high levels of fine nuisance dust may cause injury to lungs and the respiratory system. This product contains traces of crystalline silica. Inhaling crystalline silica containing dusts can aggravate respiratory conditions such as asthma or emphysema. Long term exposure to crystalline silica dust can lead to silicosis, and there is limited evidence of carcinogenicity for crystalline silica dust. Acute silicosis may occur as a result of extremely high exposure to respirable crystalline silica over a short period (<5years). Accelerated silicosis can develop over 5-10 years of exposure to high levels of respirable crystalline silica. Chronic silicosis may develop as a result of lower levels of exposure to respirable crystalline silica over >10 years. In addition to silicosis there is some evidence that exposure to respirable crystalline silica may be linked to scleroderma and an increased risk of kidney disease.

Supporting Data

Acute	Oral	Using LD ₅₀ 's for ingredients, the calculated LD ₅₀ (oral, rat) for the mixture is >2000 mg/kg. Data considered includes: calcium carbonate 6450mg/kg (rat).
	Dermal	No evidence of dermal toxicity.
	Inhaled	The substance is not considered acutely toxic if inhaled, however there may be irritation of the respiratory tract if dust is inhaled.
	Eye	The mixture is considered to be an eye irritant, because calcium carbonate is considered an eye irritant.
Chronic	Skin	The mixture is not considered to be a skin irritant. It may dry out skin (absorb moisture from skin).
	Sensitisation	No ingredient present at concentrations > 0.1% is considered a sensitizer.
	Mutagenicity	No ingredient present at concentrations > 0.1% is considered a mutagen.
	Carcinogenicity	This product contains crystalline silica. Crystalline silica inhaled in the form of quartz or cristobalite from occupational sources is carcinogenic to humans (IARC Group 1). The carcinogenicity of silica is related to long term (e.g., 10 years) inhalation of very fine particulate (e.g., from sand blasting or dry cutting of concrete). Carcinogenicity of silica appears linked to development of silicosis (see systematic below) followed by complications and, eventually lung cancer.
	Reproductive / Developmental Systemic	No ingredient present at concentrations > 0.1% is considered a reproductive or developmental toxicant or have any effects on or via lactation. There may be some irritation of the respiratory tract.
	Aggravation of existing conditions	This product contains crystalline silica which if it is in the form of a fine respirable dust may cause silicosis in an occupational setting. Exposure to respirable crystalline silica may also affect the immune system and the kidneys. Existing upper respiratory tract and lung disease. Smokers.

12. Ecological Data

Summary

These products are not considered ecotoxic.

Supporting Data

Aquatic	These products are not considered to be toxic in the aqueous environment.
Bioaccumulation	No data
Degradability	No data
Soil	These products are not considered to be toxic in the soil environment.
Terrestrial vertebrate	These products are not considered ecotoxic towards terrestrial vertebrates. . Using LD ₅₀ 's for ingredients, the calculated LD ₅₀ (oral, rat) for the mixture is >2,000 mg/kg. Data considered includes: calcium carbonate 6450mg/kg (rat).
Terrestrial invertebrate	No evidence of toxicity towards terrestrial invertebrates.
Biocidal	no data

13. Disposal Considerations

Restrictions	There are no product-specific restrictions, however, local council and resource consent conditions may apply, including requirements of trade waste consents.
Disposal method	Disposal of this product must comply with the Hazardous Substances (Disposal) Notice 2017 and the requirements of the Resource Management Act for which approval should be sought from the Regional Authority. The substance must be treated and therefore rendered non-hazardous before discharge to the environment.
Contaminated packaging	Disposal of contaminated packaging must comply with the Hazardous Substances (Disposal) Notice 2017 clause 12. Ensure that the package is rendered incapable of containing any substance and is disposed in a manner that is consistent with the requirements of the substance it contained and the material of the package. If possible reuse or recycle packaging.

14. Transport Information

Land Transport Rule: Dangerous Goods 2005 - NZS 5433:2007

There are no specific restrictions for these products (not a dangerous good).

UN number:	NA	Proper shipping name:	NA
Class(es)	NA	Packing group:	NA
Precautions:	Not applicable.	Hazchem code:	NA

15. Regulatory Information

These products are approved substances under the Hazardous Substances and New Organisms Act (HSNO). Approval code: HSR002545, Construction Products Carcinogenic Group Standard 2020.

Specific Controls

Key workplace requirements are:

SDS	To be available within 10 minutes in workplaces storing any quantity.
Inventory	An inventory of all hazardous substances must be prepared and maintained.
Packaging	All hazardous substances should be appropriately packaged including substances that have been decanted, transferred or manufactured for own use or have been supplied
Labelling	Must comply with the Hazardous Substances (Labelling) Notice 2017.
Emergency plan	Required if > 1000kg is stored.
Certified handler/tracking	Not required.
Bunding & secondary containment	Not required (non pooling substance)
Signage	Required if > 1000kg is stored.
Location compliance certificate	Not required
Flammable zone	Not required
Fire extinguisher	Not required

Note: The above workplace requirements apply if only this particular substance is present. The complete set of controls for a location will depend on the classification and total quantities of other substances present in that location.

Other Legislation

In New Zealand, the use of this product may come under the Resource Management Act and Regulations, the Health and Safety at Work Act 2015 and the Health and Safety at Work (General Risk and Workplace Management) Regulations 2016, local Council Rules and Regional Council Plans.

16. Other Information

Abbreviations

Approval Code	Approval HSR002545, Construction Products Carcinogenic Group Standard 2006 Controls, EPA. www.epa.govt.nz
CAS Number	Unique Chemical Abstracts Service Registry Number
EC₅₀	Ecotoxic Concentration 50% – concentration in water which is fatal to 50% of a test population (e.g. daphnia, fish species)
EPA	Environmental Protection Authority (New Zealand)
GHS	Globally Harmonised System of Classification and Labelling of Chemicals, 7 th revised edition, 2017, published by the United Nations.
HAZCHEM Code	Emergency action code of numbers and letters that provide information to emergency services, especially fire fighters
HSNO	Hazardous Substances and New Organisms (Act and Regulations)
IARC	International Agency for Research on Cancer
LEL	Lower Explosive Limit
LD₅₀	Lethal Dose 50% – dose which is fatal to 50% of a test population (usually rats).
LC₅₀	Lethal Concentration 50% – concentration in air which is fatal to 50% of a test population (usually rats)
NZIoC	New Zealand Inventory of Chemicals
STEL	Short Term Exposure Limit - The maximum airborne concentration of a chemical or biological agent to which a worker may be exposed in any 15 minute period, provided the TWA is not exceeded
STOT RE	System Target Organ Toxicity – Repeated Exposure
STOT SE	System Target Organ Toxicity – Single Exposure
TWA	Time Weighted Average – generally referred to WES averaged over typical work day (usually 8 hours)
UEL	Upper Explosive Limit
UN Number	United Nations Number
WES	Workplace Exposure Standard - The airborne concentration of a biological or chemical agent to which a worker may be exposed during work hours (usually 8 hours, 5 days a week). The WES relates to exposure that has been measured by personal monitoring using procedures that gather air samples in the worker's breathing zone.

References

Data	Unless otherwise stated comes from the EPA HSNO chemical classification information database (CCID).
Controls	EPA notices, www.epa.govt.nz , Health and Safety at Work (Hazardous Substances) Regulations 2017, www.legislation.govt.nz
WES	The latest NZ Workplace Exposure Standards, published by WorkSafe NZ and available on their web site – www.worksafe.govt.nz .
Other References:	Suppliers SDS

Review

Date	Reason for review
August 2017	Not applicable – new SDS
June 2022	5 yearly update HSNO to GHS.
January 2024	Addition of product codes

Disclaimer

This SDS was prepared by Datachem LTD and is based on our current state of knowledge, including information obtained from suppliers. The SDS is given in good faith and constitutes a guideline (not a guarantee of safety). The level of risk each substance poses is relevant to its properties (as summarised in the SDS) AND HOW THE SUBSTANCE IS USED. While guidelines are given for personal protective equipment, such precautions must be relevant to the use. The likely GHS classifications for this SDS have been estimated based on general information from the supplier (e.g., hazard, toxicological). This SDS is copyright Datachem and must not be copied, edited or used for other than intended purpose. To contact the SDS author, email info@datachem.co.nz or phone: +64 21 1040951.

