

SAFETY DATA SHEET



Cutting Tool Perfection

Gold Series Grinding Discs

SHEFFIELD GROUP

Catalogue number: GGDGS*

Version No: 1.2

Issue date: 12/02/2024

Safety Data Sheet according to WHS and ADG requirements.

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

Product Identifier

Product name	Gold Series Grinding Discs
Synonyms	Various
Other means of identification	Not Available

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

Relevant identified uses	Grinding
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Details of the supplier of the safety data sheet

Registered company name	SHEFFIELD GROUP
Address	111 Munibung Rd Boolaroo 2284 NSW Australia
Telephone	+61 2 4957 8787
Fax	+61 2 4957 3737
Website	www.sheffield.com.au
Email	sales@sheffield.com.au

Emergency telephone number

Association / Organisation	Poisons Information Centre
Emergency telephone numbers	13 1126
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.

Poisons Schedule	Not Applicable
GHS Classification [1]	Eye Irritation Category 2A, Specific target organ toxicity - single exposure Category 3 (respiratory tract irritation), Skin Corrosion/Irritation Category 2, Specific target organ toxicity - repeated exposure Category 1
Legend:	1. Classified by Chemwatch; 2. Classification drawn from HSIS; 3. Classification drawn from EC Directive 1272/2008 - Annex VI

Label elements

Hazard pictograms	
SIGNAL WORD	DANGER

Hazard statement(s)

H319	Causes serious eye irritation
H372	Causes damage to organs through prolonged or repeated exposure. (Bone, Respiratory system) (Inhalation)
H315	Causes skin irritation.
H335	May cause respiratory irritation.

Precautionary statement(s) Prevention

P260	Do not breathe dust / fumes
P270	Do not eat, drink or smoke when using this product.
P271	Use only outdoors or in a well-ventilated area.
P280	Wear protective gloves/protective clothing/eye protection/face protection.

Precautionary statement(s) Response

P314	Get medical advice/attention if you feel unwell.
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.
P302+P352	IF ON SKIN: Wash with plenty of water and soap.
P332+P313	If skin irritation occurs: Get medical advice/attention.
P304+P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P362	Take off contaminated clothing and wash before reuse.

Precautionary statement(s) Storage

P405	Store locked up.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.

Precautionary statement(s) Disposal

P501	Dispose of contents/container in accordance with local regulations.
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SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

Substances

See section below for composition of Mixtures

Mixtures

CAS No	%[weight]	Name
1344-28-1	<95	Aluminium oxide
409-21-2	<95	Silicon carbide
15096-52-3	<20	sodium ₂ aluminium fluoride
65997-17-3	<20	fiberglass reinforcements
7704-34-9	<2	Sulphur

NOTE: The tools may be comprised of one or more of the above abrasives and ingredients

SECTION 4 FIRST AID MEASURES

Description of first aid measures

Eye Contact	<p>If this product comes in contact with the eyes: Wash out immediately with fresh running water. Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids. Seek medical attention without delay; if pain persists or recurs Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.</p>
Skin Contact	<p>If skin contact occurs: Immediately wash with soap and running water If irritation occurs seek medical attention without delay</p>
Inhalation	<p>If dust is inhaled: Lay patient down. Keep warm and rested. Prostheses such as false teeth, which may block airway, should be removed, where possible, prior to initiating first aid procedures. 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. Seek medical advice/ attention</p>
Ingestion	<p>If ingested: Do not induce vomiting Do not give anything by mouth if patient is unconscious. Give a slurry of 3 table spoons of activated charcoal in water to drink. Seek medical attention</p>

Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5 FIREFIGHTING MEASURES

Extinguishing media

Extinguishing media	There is no restriction on the type of extinguisher which may be used. Use extinguishing media suitable for surrounding area.
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Special hazards arising from the substrate or mixture

Fire incompatibility	None known
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Advice for firefighters

Fire fighting	Wear breathing apparatus plus protective gloves in the event of a fire. Prevent, by any means available, spillage from entering drains or water courses. Use firefighting procedures suitable for surrounding area.
Fire/Explosion Hazard	Noncombustible. Not considered a significant fire risk, however containers may burn. Decomposition may produce toxic fumes of hydrogen fluoride, carbon monoxide, carbon dioxide, sulfur oxides, silicon dioxide Slight hazard when exposed to heat, flame and oxidisers.
HAZCHEM	Not Applicable

SECTION 6 ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Minor Spills	Clean up all spills immediately. Avoid breathing dust and contact with skin and eyes. Wear protective clothing, gloves, safety glasses and dust respirator. Use dry clean up procedures and avoid generating dust. Sweep up, shovel up or Vacuum up (consider explosion-proof machines designed to be grounded during storage and use). Place spilled material in clean, dry, sealable, labelled container.
Major Spills	Moderate hazard. CAUTION: Advise personnel in area. Alert Emergency Services and tell them location and nature of hazard. Control personal contact by wearing protective clothing. Prevent, by any means available, spillage from entering drains or water courses. Recover product wherever possible. IF DRY: Use dry clean up procedures and avoid generating dust. Collect residues and place in sealed plastic bags or other containers for disposal. IF WET: Vacuum/shovel up and place in labelled containers for disposal. ALWAYS: Wash area down with large amounts of water and prevent runoff into drains.

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

SECTION 7 HANDLING AND STORAGE

Precautions for safe handling

Safe handling	Limit all unnecessary personal contact. Wear protective clothing when risk of exposure occurs. Use in a well-ventilated area. Avoid contact with incompatible materials. 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. Use good occupational work practice.
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 enough 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

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	silicon carbide	Silicon carbide	10 mg/m3	Not Available	Not Available	(a) This value is for inhalable dust containing no asbestos and < 1% crystalline silica.
Australia Exposure Standards	aluminium oxide	aluminium oxide	10 mg/m3	Not Available	Not Available	a) This value is for inhalable dust containing no asbestos and < 1% crystalline silica.
Australia Exposure Standards	sodium aluminium fluoride	Fluorides (as F)	2.5 mg/m3	Not Available	Not Available	Not Available

EMERGENCY LIMITS

Ingredient	Material Name	TEEL 1	TEEL 2	TEEL 3
silicon carbide	silicon carbide	45 mg/m3	500 mg/m3	3,000 mg/m3
aluminium oxide	Aluminum oxide; (Alumina)	5.7 mg/m3	15 mg/m3	25 mg/m3
fibreglass reinforcements	Fibrous glass; (Fiber glass; Glass frit; Synthetic vitreous fibers)	15 mg/m3	170 mg/m3	990 mg/m3
Sulfur	Sulfur	30 mg/m3	330 mg/m3	2,000 mg/m3

Ingredient	Original IDLH	Revised IDLH
sodium aluminium fluoride	250 mg/m3	Not Available
silicon carbide	Not Available	Not Available
aluminium oxide	Not Available	Not Available
fibreglass reinforcements	Not Available	Not Available
Sulfur	Not Available	Not Available

Exposure controls

Appropriate engineering controls	Maintain adequate ventilation at all times If ventilation is poor, then the use of a local exhaust ventilation system is recommended.
Personal protection	
Eye and face protection	Safety glasses with side shields OR Chemical goggles. Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. 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.
Skin protection	See Hand protection below
Hands/feet protection	Wear protective gloves, Leather or light rubber are recommended for this application
Body protection	See Other protection below
Respiratory protection	Use suitable respirator if dust is produced
Other protection	Overalls. Eye wash unit
Thermal hazards	Not Available

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

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

SECTION 10 STABILITY AND REACTIVITY

Reactivity	See section 7
Chemical stability	Product is considered stable.
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 on toxicological effects

Inhaled	The material can cause respiratory irritation in some persons. The body's response to such irritation can cause further lung damage. Acute effects of fluoride inhalation include irritation of nose and throat, coughing and chest discomfort. A single acute over-exposure may even cause nose bleed.
Ingestion	No known significant effects or critical hazards.
Skin Contact	Though considered non-harmful, slight irritation may result from contact because of the abrasive nature of the aluminium oxide particles. Thus it may cause itching and skin reaction and inflammation. The material may accentuate any pre-existing dermatitis condition
Eye	This material can cause eye irritation and damage in some persons.
Chronic	Long-term exposure to respiratory irritants may result in airways disease, involving difficulty breathing and related whole-body problems..

Toxicological effects of ingredients

Aluminium oxide	Acute toxicity	Oral LD50 (rat) 15,900 mg/kg
	Skin corrosion/irritation	Shall not be classified as corrosive/irritant to skin.
	Eye damage/irritation	Shall not be classified as seriously damaging to the eye or eye irritant.
	Respiratory/skin sensitization	Shall not be classified as a respiratory or skin sensitiser.
	Germ cell mutagenicity	Shall not be classified as germ cell mutagenic.
	Carcinogenicity	Shall not be classified as carcinogenic.
	Reproductive toxicity	Shall not be classified as a reproductive toxicant.
	STOT (single exposure)	Shall not be classified as a specific target organ toxicant (single exposure).
	STOT (repeated exposure)	Shall not be classified as a specific target organ toxicant (repeated exposure).
	Aspiration toxicity	Shall not be classified as presenting an aspiration hazard.

Silicon carbide	Acute toxicity	Product does not present an acute toxicity hazard based on known information
	Skin corrosion/irritation	Prolonged contact may cause redness, irritation and dry skin.
	Eye damage/irritation	Dust in the eyes will cause irritation.
	Respiratory/skin sensitization	Based on available data, the classification criteria are not met.
	Germ cell mutagenicity	No information available
	Carcinogenicity	No information available
	Reproductive toxicity	No information available
	STOT (single exposure)	None known
	STOT (repeated exposure)	None known
	Aspiration toxicity	No information available
Sodium aluminium fluoride	Acute toxicity	Oral LD50 (rat) >5000 mg/kg Dermal LD50 (rabbit) >2100 mg/kg
	Skin corrosion/irritation	No available data.
	Eye damage/irritation	No available data.
	Respiratory/skin sensitization	No available data.
	Germ cell mutagenicity	No available data.
	Carcinogenicity	No available data.
	Reproductive toxicity	No available data.
	STOT (single exposure)	No available data.
	STOT (repeated exposure)	Causes damage to organs through prolonged or repeated exposure .
	Aspiration toxicity	No available data.
Fiberglass	Acute toxicity	No available data.
	Skin corrosion/irritation	No available data.
	Eye damage/irritation	No available data.
	Respiratory/skin sensitization	No available data.
	Germ cell mutagenicity	No available data.
	Carcinogenicity	No available data.
	Reproductive toxicity	No available data.
	STOT (single exposure)	No available data.
	STOT (repeated exposure)	No available data.
	Aspiration toxicity	No available data.
Sulphur	Acute toxicity	Oral LD50 (rat) >2000 mg/kg Inhalation LC50 (rat) 5.43 mg/L
	Skin corrosion/irritation	Causes skin irritation
	Eye damage/irritation	May cause eye irritation.
	Respiratory/skin sensitization	Based on classification principles, the classification criteria are not met.
	Germ cell mutagenicity	Based on classification principles, the classification criteria are not met.
	Carcinogenicity	This product does NOT contain any IARC listed chemicals.
	Reproductive toxicity	Based on classification principles, the classification criteria are not met.
	STOT (single exposure)	Based on classification principles, the classification criteria are not met.
	STOT (repeated exposure)	Based on classification principles, the classification criteria are not met.
	Aspiration toxicity	Based on classification principles, the classification criteria are not met.

SECTION 12 ECOLOGICAL INFORMATION

Toxicity

	Endpoint	Duration (Hr.)	Species	Value
Aluminium oxide	No available data			
Silicon carbide	No available data			
Sodium aluminium fluoride	LC50	96	Fish	42.5 mg/L
	EC50	48	Crustacea	5 mg/L
	EC50	72	Algae or other aquatic plants	3.2 mg/L
	NOEC	72	Algae or other aquatic plants	1 mg/L
Sulphur	LC50	96	Fish	<14 mg/L
	EC50	48	Crustacea	>0.005 mg/L
	EC50	96	Algae or other aquatic plants	623.589 mg/L
	EC10	672	Fish	4.18 mg/L
	NOEC	504	Crustacea	>0.0025 mg/L

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

Persistence and degradability

Ingredient	Persistence: Water/Soil	Persistence: Air
sulfur	LOW	LOW

Bio accumulative potential

Ingredient	Bioaccumulation
sulfur	LOW (LogKOW = 0.229)

Mobility in soil

Ingredient	Mobility
sulfur	LOW (KOC = 14.3)

SECTION 13 DISPOSAL CONSIDERATIONS

Waste treatment methods

Product / packaging disposal	
	Recycle containers whenever possible. Product residues and containers should be disposed of in accordance with local government regulations

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

SECTION 15 REGULATORY INFORMATION

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

SODIUM ALUMINIUM FLUORIDE (15096-52-3) IS FOUND ON THE FOLLOWING REGULATORY LISTS

- Australia Hazardous Chemical Information System (HCIS) - Hazardous Chemicals
- Australia Inventory of Chemical Substances (AICS)
- Australia Exposure Standards

SILICON CARBIDE IS FOUND ON THE FOLLOWING REGULATORY LISTS

- Australia Exposure Standards
- Australia Inventory of Chemical Substances (AICS)
- International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs

ALUMINIUM OXIDE IS FOUND ON THE FOLLOWING REGULATORY LISTS

- Australia Exposure Standards
- Australia Inventory of Chemical Substances (AICS)

FIBREGLASS REINFORCEMENTS IS FOUND ON THE FOLLOWING REGULATORY LISTS

- Australia Inventory of Chemical Substances (AICS)

SULFUR IS FOUND ON THE FOLLOWING REGULATORY LISTS

- Australia Hazardous Chemical Information System (HCIS) - Hazardous Chemicals
- Australia Inventory of Chemical Substances (AICS)

SECTION 16 OTHER INFORMATION

Revision Schedule

Revision Date	12/02/2024
Initial Date	24/11/2019

SDS Version Summary

Version	Issue Date	Sections Updated
1.1	24/11/2019	All sections originated
1.2	12/02/2024	Sections 1, 11, 12.

Other information

Classification of the preparation and its individual components has drawn on official and authoritative sources such as the ECHA C&L Chemical Inventory, CCID New Zealand, GESTIS Germany, NICNAS and HCIS Australia and supplier's dossier.

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Definitions and abbreviations

PC-TWA;	Permissible Concentration-Time Weighted Average
PC-STEL:	Permissible Concentration-Short Term Exposure Limit
IARC:	International Agency for Research on Cancer
ACGIH:	American Conference of Government Industrial Hygienists
STEL:	Short Term Exposure Limit
TEEL:	Temporary Emergency Exposure Limit
IDLH:	Immediate Danger to Life or Health Concentrations
OSF:	Odour Safety Factor
NOAEL:	No Observed Effects Level
TLV:	Threshold Limit Value
LOD:	Limit Of Detection
OTV:	Odour Threshold Value
BCF:	Bio Concentration Factors
BEI:	Biological Exposure Index

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End of SDS