

1) CHEMICAL PRODUCT AND COMPANY NAME**Safety Data Sheet****Abrasive Disc**

Part No. 742137-A, 742137-A-50, 742526-A,
 742526-A-50, 742527-A, 742527-A-50, 794518-8,
 794518-8-50, 794519-6, 794519-6-50, 794520-1,
 794520-1-50, 794521-9, 794521-9-50, 794522-7,
 794522-7-50, 794523-A, 794523-A-50

Complies with the OSHA Hazard
 Communication Standard :
 29 CFR 1910 1200

Makita U.S.A., Inc.

Prepared By : Stan Rodrigues

2) COMPOSITION, INFORMATION OR INGREDIENTS:

Substance	CAS-N°	Conc. (%)
Aluminum oxide	1344-28-1	20-50
Titanium dioxide	13463-67-7	0-5
Formaldehyde	50-00-0	<0, 1
Calcium sulfate	7778-18-9	2-10

The titanium dioxide is inextricably bound in a manner that no exposure occurs during normal use and handling

3) HAZARD IDENTIFICATION:**3.1. Classification of the substances or mixture**

As sold, this product is manufactured article and is not classified as hazardous according to OSHA Communication Standard, 29 CFR 1910.1200

3.2. Label elements

Not applicable

3.3. Other hazards

Not known.

4) FIRST AID MEASURE:

4.1 Description of first aid measures

Inhalation:

Not possible, due to the form of the product. If sanding dust is inhaled remove to fresh air. If not breathing, give artificial respiration or give oxygen by trained personnel. Seek immediate medical attention.

Eye contact:

Immediately flush eyes with plenty of water, holding open eyelids. Remove contacts lenses if present and easy to do. Get medical attention if irritation symptoms persist.

Skin contact:

Wash skin with soap and plenty of water. Get medical attention if irritation develops or persist.

Ingestion:

Not likely due to the form of the product; if swallowed do not induce vomiting and seek medical attention.

4.2 Most important symptoms and effects, both acute and delayed

Not known, but dust generated from intended use may contain trace of formaldehyde which under excessive exposure may cause skin sensitization and air way obstruction.

4.3 Indication of any immediate medical attention and special treatment needed

Not relevant. Treat symptomatically immediate medical attention is generally not required.

5) Fire-Fighting Measures:

5.1 Suitable (and unsuitable) extinguishing media

Extinguishing media are water, foam, sand, powder or CO₂ as appropriate for surrounding materials

5.2 Specific hazards arising from the product

Product is non-combustible. Toxic fumes may occur. Use respiratory protective equipment.

5.3 Special protective equipment and precaution for fire-fighters

Extinguishing materials should be selected according to the surrounding area. Firefighters should wear full emergency equipment and NIOSH approved positive pressure self-contained breathing apparatus.

6) ACCIDENTAL RELEASE MEASURES:

6.1 Personal precautions, protective equipment, and emergency procedures

Use appropriate respirator and protective clothing as needed to avoid eye contact and inhalation of dust.

6.2 Environmental precautions

Avoid runoff into storm sewers, ditches and waterways and environmental releases. Report spills as required to authorities.

6.3 Methods and materials for containment and cleaning up

Pick up, sweep up or vacuum and place in a container for disposal. Minimize generation of dust.

7) HANDLING AND STORAGE:

7.1 Precautions for safe handling

Use only with adequate ventilation, avoid breathing dust. Wash thoroughly after handling and use. Consider potential exposure to components of base materials or coating being sanded or ground. Refer to OSHA's substances specific standards for additional work practice requirements where applicable.

7.2 Conditions for safe storage, including any incompatibilities

Store in a dry location.

8) EXPOSURE CONTROLS AND PERSONAL PROTECTION:

8.1 Control parameters

Before grinding it is recommended to perform a risk assessment and to use personal protection equipment accordingly.

Occupational exposure limit values and/or biological limit values

Substance	EC-N°	Occupational limit value
Aluminum oxide	1344-28-1	5mg/m ³ ACGIH TLV (respirable fraction) as Al metal 15mg/m ³ TWA OSHA PEL (total dust) 10mg/m ³ TWA OSHA PEL (respirable fraction)
Titanium dioxide	13463-67-7	10mg/m ³ TWA ACGIH TLV 15mg/m ³ TWA OSHA PEL (total dust)
Formaldehyde	50-00-0	0,75ppm TWA OSHA PEL 2 ppm STEL OSHA PEL 0,3ppm CEILING/ PEAK ACGIH TLV
Calcium sulfate	7778-18-9	10mg/m ³ TWA ACGIH TLV (inhalable) 15mg/m ³ TWA OSHA PEL (total dust) 5mg/m ³ TWA OSHA PEL (respirable fraction)

8.2 Appropriate engineering controls

Use appropriate engineering control such as process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limit. Good general ventilation should be sufficient to control airborne levels. Where such system are not effective wear suitable personal protective equipment, which performs satisfactorily and meets OSHA or other recognized standards. Consult with local procedures for selection, training, inspection and maintenance of the personal protective equipment.

8.3 Individual protection measures, such as personal protective equipment

Respiratory protection

Use NIOSH dust mask according to 24 CFR 1910.134 if exposure limits are exceeded or where dust exposures are excessive. Selections of respiratory protection depends on the contaminant type, form and concentration

Hand protection

Wear gloves for the protection against mechanical hazards according to NIOSH

Eye/ face protection

Wear protective goggles or splash goggles, face shield as described by 29 CRF 1910.133, OSHA eye and face protection regulation.

Body protection

Safety glasses, gloves and face shield are recommended. Type of protective equipment should be selected based on ventilation conditions and other conditions of use of this material.

9) PHYSICAL AND CHEMICAL PROPERTIES:

9.1 Information on basic physical and chemical properties

Physical state:	solid article
Color:	white
Odor:	odorless
Odor threshold :	not determined
pH:	not determined
Melting point:	not determined
Freezing point:	not determined
Initial boiling point and boiling range:	not determined
Flash point:	not determined
Evaporation rate:	not determined
Flammability:	not determined
Lower flammable/explosive limit:	not applicable
Upper flammable/ explosive limit:	not applicable
Vapor pressure:	not determined
Vapor density:	not determined
Relative density:	not determined
Solubility:	not determined
Coefficient of water/n-octanol:	not determined
Auto ignition temperature:	not applicable
Viscosity :	not determined
VOC content:	not determined

9.2 Other information

None

10) STABILITY AND REACTIVITY:

10.1 Reactivity

Coated Abrasives are stable when handled or stored correctly.

10.2 Chemical stability

No decomposition in normal use.

10.3 Possibility of hazardous reactions

No dangerous reactions known.

10.4 Conditions to avoid

Coated Abrasives are stable when handled or stored correctly.

10.5 Incompatible materials

No dangerous reactions known.

10.6 Hazardous decomposition products

At temperatures exceeding 250° C hazardous or toxic decomposition products may be generated.

11) TOXICOLOGICAL INFORMATION:

Inhalation

Dust may cause respiratory irritation

Skin contact

None expected under normal use conditions. Rubbing product across the skin may cause mechanical irritation or abrasions.

Ingestion

None expected under normal use conditions. Swallowing large pieces may cause obstruction of gastrointestinal tract.

Eye contact

Dust may cause eye irritation. Dust particles may cause abrasives injury to the eyes.

Chronic effects from short and long term exposure

Prolonged inhalation of respirable dust may cause adverse lung effects. Most of the dust generated during abrasive processer is form the base material being processed and the potential hazard from this exposure must be evaluated

Carcinogenicity

Titanium dioxide
IARC: Group 2B
NTP: not listed
OSHA: not listed

Formaldehyde
IARC: Group 1 carcinogenic to humans,
NTP: Reasonably anticipated to be human carcinogen
OSHA: Designated carcinogen

Numerical measures toxicity

Aluminum oxide: LD50 Oral rat>5,000mg/ kg
Inhalation rat LC50>7.6mg/L/1hr
Titanium dioxide: LD50 Oral rat>5,000mg/kg
Inhalation rat LC50>6.82mg/ L/4h
Formaldehyde: LD50 Oral rat: 100mg/ Kg
Inhalation rat LC50: 250ppl/4h
Calcium sulfate: LD50 Oral rat>1581mg/kg
Inhalation rat LC50>3,26mg/L/4h

12) ECOLOGICAL INFORMATION:

12.1 Ecotoxicity

Aluminum oxide: 96hr LC50 Pimephales promelas 35mg/ L

Titanium dioxide: 48hr EC50 daphnia magna>500mg/L

Formaldehyde: 48hr EC50 daphnia pulex 5,8mg/L

Calcium sulfate : 96hr LC50 Pimephales promelas> 1970mg/ L,48hr EC50 daphnia magna>79mg/ L, 72hr EC50 pseudokirchnerella subcapitata >100mg/ L

12.2 Persistence and degradability

Biodegradation is not applicable to inorganic compounds

12) CONTINUED: ECOLOGICAL INFORMATION:**12.3 Bioaccumulative potential**

No data available

12.4 Mobility in soil

No data available

12.5 Other adverse effects

No data available

13) DISPOSAL CONSIDERATIONS:**13. Disposal considerations**

Dispose in accordance with all applicable local, state/provincial and federal regulations. Local regulations may be more stringent than regional and national requirements. It is the responsibility of the waste generator to determine the toxicity and physical characteristics of the material to determine the proper waste identification and disposal in compliance with applicable regulations.

14) TRANSPORT INFORMATION:

	UN number	Proper shipping name	Transport hazard class	Packing group	Environmental hazards
DOT	None	Not regulated	None	None	
TDG	None	Not regulated	None	None	

Transport in bulk (according to Annex II of MARPOL 73/78 and the IBC Code)

Not applicable

15) REGULATORY INFORMATION:**National regulations Product**

This product is an article as defined TSCA regulations and is exempt from TSCA inventory listing requirements.

Aluminum oxide

Other environmental laws: SARA title III Section 313, Toxic release: Conc. 1,0% / threshold Standard

NIOSH recommendations: Occupational Health Guideline 0021

Titanium dioxide

Carcinogenic status: IARC rating: Group 2B

OSHA Carcinogen: not listed

NTP rating: not listed

NIOSH recommendations: Occupational Health Guideline 0617

California Proposition 65 : cancer

Formaldehyde

Other environmental law:

EPCRA (SARA title III) Section 302 (40 CFR Part 355) Extremely Hazardous Substances (EHS) Threshold

Planning Quantity (TPQ) in pounds: 500 lbs.

EPCRA - 40 CFR Part 372 (SARA title III) Section 3131 Listed Chemical

Carcinogenic status: IARC: Group 1 carcinogenic to humans,

OSHA :designated carcinogen

NTP :Reasonably anticipated to be human carcinogen

California Proposition 65: Cancer

16) OTHER INFORMATION:

Abbreviations and Acronyms:

ACGIH: American Conference of Governmental Industrial Hygienists

EC 50: Median Effective Concentration

IARC: International Agency of Research on Cancer

NIOSH: National Institute of Occupational Safety and Health

OSHA: Occupational Safety and Health Administration

LC50: Lethal Concentration, 50%

LD50: Median Lethal dose, 50%

MARPOL: International Convention for Prevention of Marine Pollution from Ships

SARA: Superfund Amendments and Reauthorization Act

TLV/TWA: Threshold limit value - time weighted average

TLV/STEL: Threshold limit value - short-time exposure limit

TSCA: Toxic Substance Control Act

VOC: Volatile Organic Compound

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products.