



Material Safety Data Sheet (MSDS)

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

- a. Product type: Coated Abrasive Products (TZ931, TZ933, TS990, TS933, TS999)
- b. Manufacturer : DEERFOS CO., LTD
- c. The department of writer : R&D (Research and Development) Center
- d. Written by : Minho Kim (Mr.)
- e. The department of charge: General affairs Dept.
- f. Address : 10F/ #9-4 Yangpyeongdong 1ga, Yeongdeungpogu, Seoul, Korea (150-101)
- g. Telephone number : 82-2-780-0046
- h. Fax number : 82-2-780-0045

2. HAZARDS IDENTIFICATION

Not applicable

3. COMPOSITION /INFORMATION ON INGREDIENTS

3 1 TS990

Ingredients	Composition	CAS No	Composition %
Grain	ALUNDUM	1344-28-1	21~23
Resin	PHENOL, POLYMER WITH FORMALDEHYDE	9003-35-4	19~21
Filler	BORATE(1-), TETRAFLUORO-, POTASSIUM	14075-53-7	3~5
	CALCIUM CARBONATE, NATURAL	1317-65-3	5~7
	Cryolite	15096-52-3	7~9
	PE	-	7~9
Backing	Jute Fiber		18~28
	Paper		1~2
Others	-	-	1

3 2 TZ931

Ingredients	Composition	CAS No	Composition %
Grain	ALUNDUM	1344-28-1	10 ~ 13
Grain	ZIRCONIUM OXIDE	1314-23-4	12 ~ 15
Resin	PHENOL, POLYMER WITH FORMALDEHYDE	9003-35-4	19~21
	CALCIUM CARBONATE, NATURAL	1317-65-3	5~7
Filler	Cryolite	15096-52-3	7~9
	BORATE(1-), TETRAFLUORO-,POTASSIUM	14075-53-7	3~5
	PE	-	7~9
Backing	Jute Fiber		18~28
	Paper		1~2
Others	-	-	1~2

3.3 TZ933

Ingredients	Composition	CAS No	Composition %
Grain	ALUNDUM	1344-28-1	10 ~ 13
	ZIRCONIUM OXIDE	1314-23-4	12 ~ 15
Resin	PHENOL, POLYMER WITH FORMALDEHYDE	9003-35-4	19~21
Filler	CALCIUM CARBONATE, NATURAL	1317-65-3	2~3
Filler	Cryolite	15096-52-3	9~11
	PE	-	7~9
Backing	Jute Fiber		18~28
	Paper		1~2
Others	-	-	1~2

3.4 TS933

Ingredients	Composition	CAS No	Composition %
Grain	ALUNDUM	1344-28-1	10 ~ 13
	ZIRCONIUM OXIDE	1314-23-4	12 ~ 15
Resin	PHENOL, POLYMER WITH FORMALDEHYDE	9003-35-4	19~21
Filler	CALCIUM CARBONATE, NATURAL	1317-65-3	2~3
Filler	Cryolite	15096-52-3	9~11
	PE	-	7~9
Backing	Jute Fiber		18~28
	Paper		1~2
Others	-	-	1~2

3.4 TS999

		Composition %
ALUNDUM	1344-28-1	21~23
PHENOL, POLYMER WITH FORMALDEHYDE	9003-35-4	19~21
CALCIUM CARBONATE, NATURAL	1317-65-3	11~14
PE	-	7~9
ute Fiber		18~28
Paper		1~2
	-	1
	ALCIUM CARBONATE, NATURAL E ute Fiber	ALCIUM CARBONATE, NATURAL 1317-65-3 E - ute Fiber - aper -

4. FIRST AID MEASURES

- a. Eye Contact
 - Do not let the victim rub his eyes.
 - Gently rinse the affected eyes with clean water for at least 15 minutes.
 - Arrange for transport to the nearest medical facility for examination and treatment by a physician as soon as possible.

b. Skin Contact

- Do not absorbed through skin.(may cause abrasions)
- Obtain first aid or medical assistance, if needed.

c. Inhalation

- Remove to fresh air.
- Apply artificial respiration as needed.

- Obtain first aid or medical assistance.
- d. Ingestion
 - Obtain first aid or medical assistance, if needed.

5. FIRE FIGHTING MEASURES

- a. Extinguishing media
 - Dry chemical powder, carbon dioxide, water should be used fires.
 - Use extinguishing medias appropriate to the source of the fire.
- b. Special fire fighting procedures
 - Backing & resin binder will burn or decompose, use respiratory protection.

6. ACCIDENTAL RELEASE MEASURES

No special measures required.

7. HANDLING AND STORAGE

- a. Keep temperature at 0°C 40°C
- b. Keep humidity at 30-60%
- c. In use, do not smoke or eat
- d. Avoid rough handling or dropping
- e. Protect against physical damage

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

- a. Control parameters : Not established
- b. As needed, approved dust respirator.
- c. Wear protective eye glasses or chemical safety goggles.
- d. No precautions other than clean body covering clothing should be needed.
- e. As needed, hearing protection.

9. PHYSICAL AND CHEMICAL PROPERTIES

- a. Physical state, form : Solid
- b. Color : Light Blue
- c. Odor : None
- d. Boiling point : N/A
- e. Melting point : N/A
- f. Solubility in water : N/A
- g. Vapor pressure : N/A
- h. Specific gravity : N/A

10. STABILITY AND REACTIVITY

- a. This material is stable.
- b. Hazardous decomposition and polymerization will not occur.
- c. Decomposition products : In use, dust and decomposing resin system fumes are generated.

In most cases, the material removed from the work piece will be significantly greater than the costed abrasive product components

greater than the coated abrasive product components.

11. TOXICOLOGICAL INFORMATION

No relevant information found

12. ECOLOGICAL EFFECTS

- a. This substance is not biodegradable.
- b. This substance is not bioaccumulate.
- c. This substance is not fish toxicity.

13. DISPOSAL CONSIDERATION

This combustible material may be burned in a chemical incinerator equipped with on afterburner and scrubber.

14. TRANSPORT INFORMATION

No relevant information found

15. REGULATORY INFORMATION

The company is not able to check up the regulatory information in regard to be substances in your country or region, therefore, we request this matter would be filled by your responsibility.

16. OTHER INFORMATION

a. References

- Chemical substances of unknown or variable composition complex reaction products and biological material.

- Coated abrasives modern tool of industry.

b. Other

- The information and recommendations set forth herein are taken from sources believed to be accurate as of the date hereof; however, DEERFOS CO.,LTD. makes no warranty with respect to the accuracy of the information or the suitability of the recommendations, and assumes no liability to any user thereof.

- Please consult DEERFOS CO., LTD. for further information.

- c. Revision Date : 06. Dec. 2019
- d. Revision Number : 2