

ITEM: 6A624 - WHEEL GRINDING 4 IN

PICK REQ: 0174427268

MATERIAL SAFETY DATA SHEET (MSDS)

MSDS: A1130

This MSDS should be attached or kept with the respective product with which it is associated.

SAFETY DATA SHEET - A1130

Associated Grainger Item: 6A624 - WHEEL GRINDING 4 IN

NORTON USA FORMAT MSDS: RESIN000

MATERIAL SAFETY DATA SHEET

DATE PRINTED: FEB 08, 2000

MSDS NO. RESIN000

OUTBOUND

RESIN BONDED ABRASIVE PRODUCTS

NORTON

NORTON COMPANY

SECTION 1. CHEMICAL PRODUCT AND COMPANY INFORMATION

PRODUCT NAME: RESIN BONDED ABRASIVE PRODUCTS

TRADE NAME:

MANUFACTURER: NORTON COMPANY
1 NEW BOND ST.
WORCESTER, MA, 01615
(508) 795-5000

REVISION DATE: 2/08/2000

MSDS PRINT FORMAT: NUSA

SECTION 2. COMPOSITION/INFORMATION ON INGREDIENTS

SUBSTANCE DESCRIPTION	PERCENT	CAS#
ALUMINUM OXIDE, NON-FIBROUS	40.000-90.000	1344-28-1
BARIUM OXIDE	1.000- 5.000	1305-78-8
CARBON BLACK	0.100- 1.000	1333-86-4
CURED PHENOLFORMALDEHYDE RESIN	3.000-12.000	9003-35-4
DISS	0.003-10.000	65997-17-3
FLUORIDES	** 2.000-10.000	NA
MANGANESE COMPOUNDS(*)	** 1.000- 5.000	NA
CRYSTALLINE SILICA, QUARTZ	0.001- 1.000	14808-60-7
SILICON CARBIDE	80.000-90.000	409-21-2
SODIUM SILICATE	5.000-15.000	1344-09-8
SULFATES & SULFIDES	** 1.000-10.000	NA
IRON COMPOUND(*)	** 1.000- 5.000	NA
TANTALUM OXIDE	30.000-50.000	1314-23-4

* SUBSTANCE IS A COMPOUND AND/OR MIXTURE

OTHER:
(A) ACTUAL GRINDING TESTS WITH WHEELS KNOWN TO CONTAIN CRYSTALLINE SILICA
(B) DO NOT PRODUCE ANY DETECTABLE AMOUNT OF RESPIRABLE FREE CRYSTALLINE SILICA. THE
GRINDING WHEEL MAY BE COMPRISED OF ONLY SOME OF THE ABOVE.
(C) THIS SUBSTANCE IS REGULATED UNDER SECTION 313 OF THE EMERGENCY PLANNING
(D) UNDER THE COMMUNITY RIGHT-TO-KNOW ACT OF 1986 AND THE CANADIAN NATIONAL POLLUTION
REDUCTION INITIATIVE (NPRI).
(E) THE OSHA EXPOSURE LIMIT REPRESENTED IN SECTION 15 IS FOR RESPIRABLE DUST AND
IS ASSUMED TO BE WORST CASE EXPOSURE TO 100% CRYSTALLINE SILICA; 10
mg/M3/(%SILICA+2)

SECTION 3. HAZARDS IDENTIFICATION

INHALATION ACUTE EXPOSURE EFFECTS:
DUST MAY BE SLIGHTLY IRRITATING TO EYES AND RESPIRATORY TRACT AT HIGH
CONCENTRATIONS.

INHALATION CHRONIC EXPOSURE EFFECTS:
CHRONIC: MAY AFFECT BREATHING CAPACITY.
FOR PRODUCTS CONTAINING PHENOL/FORMALDEHYDE RESIN, DUST GENERATED FROM
GRINDING
MAY CONTAIN TRACE AMOUNTS OF PHENOL AND FORMALDEHYDE WHICH UNDER
EXCESSIVE
EXPOSURE MAY CAUSE SKIN SENSITIZATION AND AIRWAY OBSTRUCTION.
FOR PRODUCTS CONTAINING INORGANIC FLUORIDES, EXCESSIVE EXPOSURE TO INORGANIC
FLUORIDES HAVE BEEN SHOWN TO INCREASE BONE DENSITY.

SKIN CONTACT ACUTE EXPOSURE EFFECTS: DUST MAY IRRITATE EYES.

SKIN CONTACT ACUTE EXPOSURE EFFECTS:
DUST MAY EXPERIENCE SKIN IRRITATION FROM DUST.

INGESTION ACUTE EXPOSURE EFFECTS:
NO KNOWN ADVERSE EFFECTS, BUT INGESTION NOT RECOMMENDED.

SECTION 4. FIRST AID MEASURES

INHALATION:
REMOVE TO FRESH AIR. IF BREATHING HAS STOPPED, GIVE ARTIFICIAL RESPIRATION.
GET
MEDICAL ATTENTION IMMEDIATELY.

SKIN CONTACT:
WASH AFFECTED AREAS WITH SOAP AND WATER. OBTAIN MEDICAL ASSISTANCE.

EYE CONTACT:
WASH WITH LARGE AMOUNTS OF WATER. OBTAIN FIRST AID AND MEDICAL ASSISTANCE,
IF
NEEDED.

INGESTION:
CALL POISON CONTROL CENTER, HOSPITAL EMERGENCY ROOM OR PHYSICIAN
IMMEDIATELY.

SECTION 5. FIRE FIGHTING MEASURES

FIRE FIGHTING PROCEDURES: NOT APPLICABLE

HAZARDOUS PRODUCTS/COMBUSTION: NONE

HAZARD RATING SOURCE

NFPA
HEALTH 1
FLAMMABILITY 0
REACTIVITY 0
OTHER:

SECTION 6. ACCIDENTAL RELEASE MEASURES

CLEAN-UP: FOLLOW NORMAL CLEAN UP PROCEDURES.

SECTION 7. HANDLING AND STORAGE

HANDLING:
ALWAYS HANDLE AND STORE WHEELS IN A CAREFUL MANNER.
ALWAYS VISUALLY INSPECT ALL WHEELS BEFORE MOUNTING.
ALWAYS CHECK MACHINE SPEED AGAINST THE ESTABLISHED MAXIMUM SAFE OPERATING
SPEED
MARKED ON THE WHEEL.
ALWAYS CHECK MOUNTING FLANGES FOR EQUAL AND CORRECT DIAMETER.
ALWAYS USE MOUNTING BLOTTERS.
ALWAYS BE SURE WORK REST IS PROPERLY ADJUSTED.
ALWAYS USE A SAFETY GUARD COVERING AT LEAST ONE-HALF OF THE GRINDING WHEEL.
ALWAYS ALLOW NEWLY MOUNTED WHEELS TO RUN AT OPERATING SPEED, WITH GUARD IN
PLACE, FOR AT LEAST ONE MINUTE BEFORE GRINDING.
ALWAYS TURN OFF COOLANT BEFORE STOPPING WHEEL TO AVOID CREATING AN OUT-OF-
BALANCE WHEEL.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

VENTILATION PROTECTION:
HANDLE WITH ADEQUATE VENTILATION. SEE OSHA 29 CFR 1910.94 (VENTILATION) AND
29
CFR 1910.1000 (AIR CONTAMINANTS).

RESPIRATORY PROTECTION:
RESPIRATORS ARE REQUIRED WHEN AIRBORNE CONTAMINANT LEVELS EXCEED THE TLV(S).

EYE PROTECTION:
ALWAYS WEAR SAFETY GLASSES OR SOME TYPE OF EYE PROTECTION WHEN GRINDING.

OTHER PROTECTION:
USE OF THIS PRODUCT MAY CREATE ELEVATED SOUND LEVELS. HEARING PROTECTION
SHOULD
BE WORN WHERE REQUIRED (SEE OSHA 29 CFR 1910.134 AND OTHER APPLICABLE
REGULATIONS).

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE & ODOR: SOLID ARTICLE. ODORLESS.

SECTION 10. STABILITY AND REACTIVITY

INCOMPATIBILITIES: AVOID ACIDS OF ALL TYPES WITH A PH < 4.0.

DECOMPOSITION:
IN USE, DUST AND DECOMPOSING ODORS MAY BE GENERATED. IN MOST CASES, THE
MATERIAL
REMOVED FROM THE WORKPLACE WILL BE SIGNIFICANTLY GREATER THAN THE GRINDING
WHEEL
COMPONENTS. COOLANTS MAY PRODUCE OTHER DECOMPOSITION PRODUCTS.

FOR PRODUCTS CONTAINING PHENOL AND FORMALDEHYDE RESIN, THERMAL DECOMPOSITION
MAY
PRODUCE TRACE AMOUNTS OF PHENOL AND FORMALDEHYDE. FOR PRODUCTS CONTAINING
INORGANIC FLUORIDES, THERMAL DECOMPOSITION MAY PRODUCE TRACE AMOUNTS OF
FLUORIDES.

SECTION 11. TOXICOLOGICAL INFORMATION

CARCINOGENICITY:
FIBERGLASS CONTAINED IN WHEELS HAVE FIBER DIAMETERS GREATER THAN 10 UM,
THEREFORE CONSIDERED NON-RESPIRABLE.

CRYSTALLINE SILICA, QUARTZ - IARC-1, NIOSH-X, NTP-R

LD50/LCS0: VALUES ARE NOT APPROPRIATE OR AVAILABLE.

SECTION 12. ECOLOGICAL INFORMATION

CHEMICAL FATE:
RESIN BONDED MATERIALS DEMONSTRATE SIMILAR DEGRADATION RATES AS PHENOLIC
LASTICS.
TRITIFIED PRODUCTS DO NOT APPRECIABLY DECAY.

SECTION 13. DISPOSAL CONSIDERATIONS

DISPOSAL:
USE STANDARD LANDFILL METHODS CONSISTENT WITH APPLICABLE FEDERAL, STATE,
PROVINCIAL AND LOCAL LAWS.
PRODUCTS WITH LISTED FLUORIDES MAY HAVE SLIGHTLY SOLUBLE FLUORIDE SWARF.
NORTON RECYCLING PROGRAM - NORTON COMPANY HAS DEVELOPED A GRINDING WHEEL
RECYCLING PROGRAM. IF YOU ARE INTERESTED IN RETURNING YOUR STUBS,
FOR INFORMATION
CONTACT CAN BE OBTAINED BY DIALING (508) 795-5000.

SECTION 14. TRANSPORT INFORMATION

HAZARD CLASS:
THIS PRODUCT IS NOT HAZARDOUS AS DEFINED BY THE DEPARTMENT OF
TRANSPORTATION.
(USA)
THIS PRODUCT IS "NOT REGULATED" UNDER THE TRANSPORTATION OF DANGEROUS GOODS
ACT.
(CAN)

SECTION 15. REGULATORY INFORMATION

SUBSTANCE DESCRIPTION	EXPOSURE LIMITS/REGULATORY INFORMATION				
	UNITS	OSHA	ACGIH	MOL	
ALUMINUM OXIDE, NON-FIBROUS	MG/M3	15.0000	10.0000	10.0000	6
BARIUM OXIDE	MG/M3	5.0000	2.0000	0.0000	5
CARBON BLACK	MG/M3	3.5000	3.5000	0.0000	0
RED PHENOLFORMALDEHYDE RESIN	PPM	0.0000	0.0000	0.0000	0
BERGLASS	FBR/CC	1.0000	0.0000	0.0000	0
ORGANIC FLUORIDES	MG/M3	2.5000	2.5000	2.5000	2
MANGANESE COMPOUNDS(+)		0.0000	0.0000	0.0000	0
CRYSTALLINE SILICA, QUARTZ	MG/M3	0.1000	0.1000	0.0000	0
SILICON CARBIDE	MG/M3	10.0000	10.0000	10.0000	4
DIOXIDE SILICATE	MG/M3	15.0000	0.0000	0.0000	0
OXIDES & SULFIDES	MG/M3	0.0000	0.0000	0.0000	0
NOXIOUS SUBSTANCE(+)		0.0000	0.0000	0.0000	0
ARSENIC OXIDE	MG/M3	5.0000	5.0000	5.0000	5

LEGEND:

EXPOSURE LIMIT DESCRIPTIONS

PROP 65:
THIS PRODUCT CONTAINS CHEMICALS, CRYSTALLINE SILICA, KNOWN TO THE STATE OF
CALIFORNIA TO CAUSE CANCER.

SECTION 8(B) - INVENTORY STATUS
ALL COMPONENTS OF THIS PRODUCT ARE REGISTERED UNDER THE REGULATIONS OF THE
TOXIC SUBSTANCE CONTROL ACT.

DOMESTIC SUBSTANCE LIST:
ALL COMPONENTS OF THIS PRODUCT ARE FOUND ON THE DOMESTIC SUBSTANCE LIST.

SECTION 16. OTHER INFORMATION

DEFINITION TO ABBREVIATIONS:

EQ=EQUAL LT=LESS THAN GT=GREATER THAN
AP=APPROXIMATELY TR=TRACE ND=NO DATA AVAILABLE

DISCLAIMER:
THE INFORMATION AND RECOMMENDATIONS SET FORTH HEREIN ARE TAKEN FROM SOURCES
DEEMED TO BE ACCURATE AS OF THE DATE HEREOF; HOWEVER, NORTON COMPANY 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.