MATERIAL SAFETY DATA SHEET

DIVISION: ABRASIVE SYSTEMS DIVISION

TRADE NAME: COATED ABRASIVE PRODUCTS WITH SILICON CARBIDE MINERAL

3M I.D. NUMBER: 60-5100-1770-4

ISSUED: AUGUST 5, 1993
SUPERSEDES: FEBRUARY 20, 1992
DOCUMENT: 10-6755-2

1. INGREDIENT C.A.S. NO. PERCENT
BACKING - CLOTH OR PAPER OR FILM Unknown 15.0 - 60.0
SILICON CARBIDE 409-21-2 20.0 - 50.0
CURED ADHESIVE - ORGANIC GLUE OR RESIN OR COMBINATION Unknown 10.0 - 40.0

2. PHYSICAL DATA

BOILING POINT: N/A
VAPOR PRESSURE: N/A
VAPOR DENSITY: N/A
EVAPORATION RATE: N/A
SOLUBILITY IN WATER: N/A
SP. GRAVITY: N/D
PERCENT VOLATILE: N/A
VOLATILE ORGANICS: N/A
VOC LESS H2O & EXEMPT SOLVENT N/A
pH: N/A
VISCOSITY: N/A
MELTING POINT: N/D
APPEARANCE AND ODOR: SOLID ABRASIVE PRODUCT, NO ODOR.

3. FIRE AND EXPLOSION HAZARD DATA

FLASH POINT: N/A
FLAMMABLE LIMITS - LEL: N/A
FLAMMABLE LIMITS - UEL: N/A
AUTOIGNITION TEMPERATURE: N/A
EXTINGUISHING MEDIA:
Water, Carbon dioxide, Dry chemical, Foam
SPECIAL FIRE FIGHTING PROCEDURES:
Wear full protective clothing, including helmet, self-contained,
positive pressure or pressure demand breathing apparatus, bunker coat
and pants, bands around arms, waist and legs, face mask, and
protective covering for exposed areas of the head.
UNUSUAL FIRE AND EXPLOSION HAZARDS:
Not applicable.
NFPA-HAZARD-CODES: HEALTH 1 FIRE 0 REACTIVITY 0
UNUSUAL REACTION HAZARD: none

4. REACTIVITY DATA

STABILITY: Stable
INCOMPATIBILITY - MATERIALS TO AVOID:
None known.
HAZARDOUS POLYMERIZATION: Will Not Occur

Abbreviations: N/D - Not Determined N/A - Not Applicable
4. REACTIVITY DATA

HAZARDOUS DECOMPOSITION PRODUCTS:
Carbon Monoxide and Carbon Dioxide

5. ENVIRONMENTAL INFORMATION

SPILL RESPONSE:
Not applicable.

RECOMMENDED DISPOSAL:
Incinerate in an industrial or commercial facility in the presence of
a combustible material. Dispose of waste product in a sanitary
landfill.

ENVIRONMENTAL DATA:
Not determined.

REGULATORY INFORMATION:
Since regulations vary, consult applicable regulations or authorities
before disposal.

OTHER ENVIRONMENTAL INFORMATION:
THE SUBSTRATE THAT WAS ABRADED MUST BE CONSIDERED AS A FACTOR IN THE
DISPOSAL METHOD FOR THIS PRODUCT.

SARA HAZARD CLASS:
FIRE HAZARD: No PRESSURE: No REACTIVITY: No ACUTE: Yes CHRONIC: No

6. SUGGESTED FIRST AID

EYE CONTACT:
Immediately flush eyes with large amounts of water. Get immediate
medical attention.

SKIN CONTACT:
Wash affected area with soap and water.

INHALATION:
If signs/symptoms occur, remove person to fresh air. If
signs/symptoms continue, call a physician.

IF SWALLOWED:
No need for first aid is anticipated.

7. PRECAUTIONARY INFORMATION

EYE PROTECTION:
Wear safety glasses to prevent eye contact with dust created from
grinding substrate.

SKIN PROTECTION:
Wear gloves to prevent skin contact with dust created from grinding.

Abbreviations: N/D - Not Determined N/A - Not Applicable
7. PRECAUTIONARY INFORMATION (continued)

substrate.

VENTILATION PROTECTION:
Provide appropriate local exhaust for grinding, cutting or sanding cured material. If exhaust ventilation is not adequate, use appropriate respiratory protection.

RESPIRATORY PROTECTION:
Avoid inhalation of dust created by cutting, sanding or grinding. Select one of the following NIOSH approved respirators based on airborne concentration of contaminants and in accordance with OSHA regulations: half-mask dust respirator.

PREVENTION OF ACCIDENTAL INGESTION:
Not applicable.

RECOMMENDED STORAGE:
Not applicable.

FIRE AND EXPLOSION AVOIDANCE:
Not applicable.

<table>
<thead>
<tr>
<th>INGREDIENTS</th>
<th>VALUE</th>
<th>UNIT</th>
<th>TYPE AUTH</th>
<th>SKIN*</th>
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<tbody>
<tr>
<td>BACKING - CLOTH OR PAPER OR FILM</td>
<td>NONE</td>
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<td>NONE NONE</td>
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<tr>
<td>SILICON CARBIDE</td>
<td>10 mg/m3</td>
<td>TWA</td>
<td>ACGIH</td>
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<td>OSHA</td>
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<td>CURED ADHESIVE - ORGANIC GLUE OR RESIN OR COMBINATION</td>
<td>NONE</td>
<td>NONE</td>
<td>NONE NONE</td>
<td>NONE</td>
</tr>
</tbody>
</table>

* SKIN NOTATION: Listed substances indicated with "Y" under SKIN refer to the potential contribution to the overall exposure by the cutaneous route including mucous membrane and eye, either by airborne or, more particularly, by direct contact with the substance. Vehicles can alter skin absorption.

SOURCE OF EXPOSURE LIMIT DATA:
- ACGIH: American Conference of Governmental Industrial Hygienists
- OSHA: Occupational Safety and Health Administration
- NONE: None Established

8. HEALTH HAZARD DATA

EYE CONTACT:
Mechanical eye irritation: signs/symptoms can include irritation, redness, scratching of the cornea and tearing.

Dust created by cutting, grinding, sanding, or machining may cause eye irritation.

SKIN CONTACT:
Mechanical skin irritation: signs/symptoms can include itching and

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8. HEALTH HAZARD DATA (continued)

redness.

INHALATION:
Irritation (upper respiratory): signs/symptoms can include soreness of the nose and throat, coughing and sneezing.

Dust from cutting, grinding, sanding or machining may cause irritation of the respiratory system.

IF SWALLOWED:
Ingestion is not a likely route of exposure to this product.

OTHER HEALTH HAZARD INFORMATION:
HEALTH HAZARD DEGREE BASED ON MATERIAL BEING ABRADED.

SECTION CHANGE DATES

HEADING SECTION CHANGED SINCE FEBRUARY 20, 1992 ISSUE
PHYSICAL DATA SECTION CHANGED SINCE FEBRUARY 20, 1992 ISSUE
FIRE & EXP. DATA SECTION CHANGED SINCE FEBRUARY 20, 1992 ISSUE
REACTIVITY DATA SECTION CHANGED SINCE FEBRUARY 20, 1992 ISSUE
ENVIRON. DATA SECTION CHANGED SINCE FEBRUARY 20, 1992 ISSUE
FIRST AID SECTION CHANGED SINCE FEBRUARY 20, 1992 ISSUE
PRECAUT. INFO. SECTION CHANGED SINCE FEBRUARY 20, 1992 ISSUE
HEALTH HAZD. DATA SECTION CHANGED SINCE FEBRUARY 20, 1992 ISSUE

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The information on this Data Sheet represents our current data and best opinion as to the proper use in handling of this material under normal conditions. Any use of the material which is not in conformance with this Data Sheet or which involves using the material in combination with any other material or any other process is the responsibility of the user.