

TECHALLOY MARYLAND INC REID-AVERY DIVISION -- E6011 TECHALLOY -- 3439-00-262-2652  
===== Product Identification =====

Product ID:E6011 TECHALLOY

MSDS Date:09/01/1989

FSC:3439

NIIN:00-262-2652

MSDS Number: BJRMN

=== Responsible Party ===

Company Name:TECHALLOY MARYLAND INC REID-AVERY DIVISION

Address:2310 CHESAPEAKE AVE

City:BALTIMORE

State:MD

ZIP:21222-4012

Country:US

Info Phone Num:301-633-9300 OR

800-638-1458

Emergency Phone Num:301-633-9300 OR 800-638-1458

CAGE:59711

=== Contractor Identification ===

Company Name:KAMPI COMPONENTS CO., INC.

Address:210 RT 13

Box:721

City:BRISTOL

State:PA

ZIP:19007-3517

Country:US

Phone:215-736-2000

CAGE:7Z016

Company Name:TECHALLOY COMPANY, INC.

Address:2310 CHESAPEAKE AVENUE

Box:City:BALTIMORE

State:MD

ZIP:21222

Country:US

Phone:410-633-9300; 800-638-1458

CAGE:59711

===== Composition/Information on Ingredients =====

Ingred Name:IRON

CAS:7439-89-6  
RTECS #:NO4565500  
Fraction by Wt: 65-85%  
Other REC Limits:NONE SPECIFIED

Ingred Name:MANGANESE (SARA III)  
CAS:7439-96-5  
RTECS #:OO9275000  
Fraction by Wt: 1-5%  
Other REC Limits:NONE SPECIFIED  
OSHA PEL:(C) 5 MG/M3 DUST  
ACGIH TLV:5 MG/M3 DUST 9293

Ingred Name:SILICON  
CAS:7440-21-3  
RTECS #:VW0400000  
Fraction by Wt: 1-5%  
Other REC Limits:NONE SPECIFIED  
OSHA PEL:15 MG/M3 TDUST  
ACGIH TLV:10 MG/M3 TDUST; 9293

Ingred Name:TITANIUM DIOXIDE  
CAS:13463-67-7  
RTECS #:XR2275000  
Fraction by Wt:  
1-15%  
Other REC Limits:NONE SPECIFIED  
OSHA PEL:15 MG/M3 TDUST  
ACGIH TLV:10 MG/M3 TDUST; 9293

Ingred Name:CELLULOSE (PAPER FIBER)  
CAS:9004-34-6  
RTECS #:FJ5691460  
Fraction by Wt: 0.5-10%  
Other REC Limits:NONE SPECIFIED  
OSHA PEL:15 MG/M3 TDUST  
ACGIH TLV:10 MG/M3; 9192

Ingred Name:CALCIUM CARBONATE (MARBLE) (LIMESTONE)  
CAS:1317-65-3  
RTECS #:EV9580000  
Fraction by Wt: 1-5%  
Other REC Limits:NONE SPECIFIED  
OSHA PEL:15 MG/M3 TDUST  
ACGIH TLV:10 MG/M3 TDUST; 9192

Ingred Name:SILICA GEL  
CAS:112945-52-5

RTECS #:VV7310000  
Fraction by Wt: 1-5%  
Other REC Limits:NONE SPECIFIED

Ingred Name:POTASSIUM TITANATE  
CAS:12030-97-6  
Fraction by Wt: 0-3%  
Other REC Limits:NONE SPECIFIED

Ingred Name:SODIUM TITANATE  
CAS:12034-34-3  
Fraction by Wt: 0-2%  
Other REC Limits:NONE SPECIFIED

Ingred Name:POTASSIUM ALUMINUM SILICATE (FELDSPAR)  
CAS:68476-25-5  
Fraction by Wt: 0-3%  
Other REC Limits:NONE SPECIFIED

Ingred Name:IRON OXIDE  
CAS:1309-38-2  
RTECS #:OM4800000  
Fraction by Wt: 0-5%  
Other REC Limits:NONE SPECIFIED  
OSH  
A PEL:5 MG/M3  
ACGIH TLV:10 MG/M3 (AS FE2O3)

Ingred Name:GRAPHITE, NATURAL  
CAS:7782-42-5  
RTECS #:MD9659600  
Fraction by Wt: 0-5%  
Other REC Limits:NONE SPECIFIED  
OSHA PEL:15 MPPCF RDUST  
ACGIH TLV:2 MG/M3 RDUST; 9293

Ingred Name:ALPHA-ALUMINA (ALUMINUM OXIDE) (EPA LISTS ONLY FIBROUS  
FORMS) (SARA III)  
CAS:1344-28-1  
RTECS #:BD1200000  
Fraction by Wt: 0-2%  
Other REC Limits:NONE SPECIFIED  
OSHA PEL:15 MG/M3 TDUST  
ACGIH TLV:10 MG/M3 TDUST; 9293

Ingred Name:POTASSIUM SILICATE  
CAS:1312-76-1  
Fraction b

y Wt: 0-5%  
Other REC Limits:NONE SPECIFIED

Ingred Name:SODIUM SILICATE  
CAS:1344-09-8  
Fraction by Wt: 0-5%  
Other REC Limits:NONE SPECIFIED

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===== Hazards Identification =====

LD50 LC50 Mixture:UNCLASSIFIED WELDING FUMES=5MG/M3 PEL  
Routes of Entry: Inhalation:YES Skin:YES Ingestion:NO  
Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO  
Health Hazards Acute and Chronic:ACUTE: OVEREXPOSURE TO WELDING FUMES,  
GASES OR DUST MAY RESULT IN DISCOMFORT. CHRONIC: O  
VEREXPOSURE CAN  
LEAD TO SIDEROSIS & IS BELIEVED TO AFFECT PULMONARY FUNCTION.  
Explanation of Carcinogenicity:RESPIRATORY CANCER FROM WELDING IS  
UNCONFIRMED.  
Effects of Overexposure:EXPOSURE TO WELDING FUMES MAY RESULT IN  
DIZZINESS, NAUSEA, FEVER, DRYNESS AND/OR IRRITATION OF NOSE, THROAT  
AND EYES.  
Medical Cond Aggravated by Exposure:NONE SPECIFIED BY MANUFACTURER.

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===== First Aid Measures =====

First Aid:REMOVE TO FRESH AIR, OBTAIN MEDICAL  
ATTENTION. EMPLOY FIRST  
AID TECHNIQUES RECOMMENDED BY THE AMERICAN RED CROSS.

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===== Fire Fighting Measures =====

Unusual Fire/Explosion Hazard:WELDING ARCS & SPARKS CAN IGNITE  
COMBUSTIBLES & FLAMMABLES. REFER TO AMERICAN NATIONAL STANDARD  
Z49.1 FOR FIRE PREVENTION DURING WELDING & ALLIED PROCEDURES.

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===== Handling and Storage =====

Handling and Storage Precautions:NONE SPECIFIED BY MANUFACTURER.  
Other Precautio

ns:FUMES AND GASES CAN BE DANGEROUS TO YOUR HEALTH. ARC RAYS CAN INJURE EYES AND BURN SKIN. ELECTRIC SHOCK CAN KILL.

===== Exposure Controls/Personal Protection =====

Respiratory Protection:USE WELD FUME RESPIRATOR OR AIR SUPPLIED RESPIRATOR WHEN CUTTING, GRINDING OR WELDING IN A CONFINED SPACE OR WHERE LOCAL EXHAUST OR GENERAL VENTILATION DOES NOT KEEP EXPOSURE BELOW RECOMMENDED LIMITS. USE ONLY NIOSH APPROVED RESPIRATORS.

Ventilation:USE ENOUGH VENTILATION

WHEN CUTTING, GRINDING OR WELDING TO

KEEP THE DUST, FUMES & GASES FROM THE WORKERS BREATHING ZONE

Protective Gloves:WELDERS LEATHER GLOVES

Eye Protection:OSHA APPROVED GOGGLES/FACE SHIELD W/LENS

Other Protective Equipment:FLAME RETARDANT CLOTHING WHEN CUTTING, GRINDING OR WELDING. DO NOT EXPOSE SKIN TO RADIATION WHEN HOT CUTTING OR WELDING.

Work Hygienic Practices:WASH THOROUGHLY BEFORE EATING OR SMOKING.

LAUNDER CONTAMINATED CLOTHING BEFORE REUSE.

Supplemental Safety and Health

WELDING AND HOT CUTTING FUMES & GASES CANNOT BE CLASSIFIED SIMPLY. THEIR COMPOSITION AND QUANTITY ARE DEPENDENT ON THE METAL BEING WELDED, THE PROCEDURES, PROCESSES AND THE TYPE OF WIRE OR ELECTRODES USED. OTHER INFLUENCING FACTORS ARE THE PRESENCE OF CONTAMINANTS. CHLORINATED SOLVENTS MAY DECOMPOSE TO TOXIC GASES.

===== Physical/Chemical Properties =====

HCC:V7

===== Stability and Reactivity Data =====

Stability Indicator

/Materials to Avoid:YES

NONE.

Stability Condition to Avoid:NONE, UNLESS OTHERWISE SPECIFIED.

Hazardous Decomposition Products:WELDING AND CUTTING OPERATION MAY INCLUDE OXIDES OF IRON & COMPLEX OXIDES OF MN, SI, & AL; CO, CO2, & OZONE.

===== Disposal Considerations =====

Waste Disposal Methods:PREVENT WASTE FROM CONTAMINATING ENVIRONMENT. DISCARD ANY PRODUCT RESIDUE, DISPOSABLE CONTAINER OR LINER IN AN ENVIRONMENTALLY ACCEPTABLE MANNER, I/A/W FEDE

## RAL, STATE & LOCAL REGULATIONS

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