

HOBART TAFA TECHNOLOGIES, INC. -- TAFA 1342 TUNGSTEN CARBIDE 12 COBALT --  
3439-01-397-4199

===== Product Identification =====

Product ID:TAFA 1342 TUNGSTEN CARBIDE 12 COBALT

MSDS Date:07/15/1994

FSC:3439

NIIN:01-397-4199

MSDS Number: BYCGN

=== Responsible Party ===

Company Name:HOBART TAFA TECHNOLOGIES, INC.

Address:146 PEMBROKE ROAD

City:CONCORD

State:NH

ZIP:03301

Country:US

Info Phone Num:603-22

4-9585

Emergency Phone Num:603-224-9585

CAGE:FO895

=== Contractor Identification ===

Company Name:HOBART TAFA TECHNOLOGIES INC

Address:146 PEMBROKE RD

City:CONCORD

State:NH

ZIP:03301-5000

Country:US

Phone:603-224-9585

CAGE:FO895

Company Name:STARGHILL TECHNOLOGIES CORP

Address:3850 OAKMAN BLVD

Box:City:DETROIT

State:MI

ZIP:48204-1119

Country:US

Phone:313-933-4141

CAGE:0VYG8

Company Name:TAFA INC

Address:146 PEMBROKE RD

Box:City:CONCORD

State:NH

ZIP:03301

Country:US

Phone:603-224-9585

CAGE:26057

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

Ingred Name:TUNGSTEN  
CAS:7440-33-7  
RTECS #:YO7175000  
Fraction by Wt: 82% %  
Other REC Limits:NONE RECOMMENDED  
OSHA PEL:5 MG/M3/ 10 STEL  
ACGIH TLV:5 MG/M3/10 STEL;9192

Ingred Name:COBALT (SARA III)  
CAS:7440-48-4  
RTECS #:GF8750000  
Fraction by Wt: 12% %  
Other REC Limits:NONE RECOMMENDED  
OSHA PEL:0.05 MG/M3  
ACGIH TLV:0.05 MG/M3;DUST 9192

Ingred Name:IRON  
CAS:7439-89-6  
RTECS #:NO4565500  
Fraction by Wt: 2% %  
Other REC Limits:NONE  
RECOMMENDED

Ingred Name:CARBON BLACK  
CAS:1333-86-4  
RTECS #:FF5800000  
Fraction by Wt: 4% %  
Other REC Limits:NONE RECOMMENDED  
OSHA PEL:3.5 MG/M3  
ACGIH TLV:3.5 MG/M3; 9192

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

LD50 LC50 Mixture:NOT GIVEN FOR PRODUCT AS A WHOLE  
Routes of Entry: Inhalation:YES Skin:YES Ingestion:NO  
Reports of Carcinogenicity:NTP:NO IARC:YES OSHA:NO  
Health Hazards Acute and Chronic:SHORT TERM EXPOSURE TO POWDER AND  
SPRAY ARC FUMES MAY RESUL

T IN IRRITATION OF THE NOSE, THROAT, EYES  
AND SKIN. CHRONIC OVEREXPOSURE TO POWDER AND SPRAY ARC FUMES MAY  
RESULT IN BRONCHIAL ASTHMA, LUNG FIBROSIS OR PNEUMOCONIOSIS.  
ELECTRIC SHOCK CAN KILL. ARC RAYS MAY INJURE EYES AND BURN SKIN. NO  
HAZARD DURING STORAGE.

Explanation of Carcinogenicity:CONTAINS COBALT COMPOUNDS CONSIDERED AS  
CARCINOGENS PER MANUFACTURER.

Effects of Overexposure:RESPIRATORY TRACT IRRITATION, TIGHTENING OF  
CHEST, PRODUCTIVE COUGH, SKIN IRRITATION, DERMA

TITIS, WEIGHT LOSS,  
EYE IRRITATION, REDUCED PULMONARY FUNCTION, DIFFUSE NODULAR  
FIBROSIS OF LUNGS, SIDEROSIS.

Medical Cond Aggravated by Exposure:IMPAIRED LUNG FUNCTION (ASTHMA-LIKE  
CONDITIONS).

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

First Aid:INHALATION: IF PULMONARY SYMPTOMS DEVELOP, REMOVE FROM  
EXPOSURE AND SEEK MEDICAL ATTENTION. SKIN: WASH THOROUGHLY WITH  
SOAP AND WATER. IF IRRITATION DEVELOPS, SEEK MEDICAL ATTENTION.  
EYES: FLUSH WITH  
LARGE AMOUNTS OF WATER FOR AT LEAST 10 MINUTES.  
IF IRRITATION DEVELOPS, SEEK MEDICAL ATTENTION. INGESTION: DRINK  
LARGE AMOUNTS OF WATER AND INDUCE VOMITING. GET MEDICAL ATTENTION.

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

Flash Point:NONFLAMMABLE

Lower Limits:NOT GIVEN

Upper Limits:NOT GIVEN

Extinguishing Media:COVER BURNING POWDER WITH DRY SAND OR LIMESTONE TO  
SMOTHER FLAME.

Fire Fighting Procedures:FIRE FIGHTERS SHOULD WEAR SELF CONTAINED  
BREATHING

APPARATUS AND FULL PROTECTIVE GEAR. IF FIRE OCCURS IN  
OPEN DRUMS, SEAL DRUM WITH LID TO SMOTHER FLAMES.

Unusual Fire/Explosion Hazard:DUST MAY PRESENT FIRE OR EXPLOSION HAZARD  
IN CONFINED AREA. THIS IS NOT EXPECTED UNDER NORMAL HANDLING  
PROCEDURES.

===== Accidental Release Measures =====

Spill Release Procedures:REMOVE ALL SOURCES OF IGNITION. VENTILATE AREA  
OF SPILL. USE CLEANUP METHODS WHICH AVOID DUST GENERATION SUCH AS  
VACUUMING WITH APPROPR

IATE FILTERS. IF DUST IS GENERATED, USE AN  
APPROPRIATE NIOSH APPROVED RESPIRATOR.  
Neutralizing Agent:NONE SPECIFIED BY MANUFACTURER.

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

Handling and Storage Precautions:STORE IN COOL, DRY PLACE. MAINTAIN  
GOOD HOUSEKEEPING PROCEDURES TO PREVENT ACCUMULATION OF DUST. USE  
CLEANUP METHODS WHICH MINIMIZE DUST GENERATION.

Other Precautions:KEEP CONTAINERS CLOSED WHEN NOT IN USE. DO NOT SHAKE  
CLOTHING TO REMOVE DUST. AVOID  
INHALATION AND SKIN CONTACT.

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

Respiratory Protection:IF PERSONAL EXPOSURE CANNOT BE CONTROLLED BELOW  
THE APPLICABLE LIMITS, WEAR A PROPERLY FITTED FUME/DUST RESPIRATOR  
APPROVED BY NIOSH/MSHA FOR PROTECTION AGAINST INGREDIENTS. REFER TO  
OSHA STANDARD 1910.134, ON RESPIRATORY PROTECTION.

Ventilation:USE ENOUGH VENTILATION TO KEEP DUSTS, FUMES AND GASES BELOW  
THE PELs AND TLVs IN WORKER'S BREATHING ZONE.

Protective

Gloves:WHEN WELDING, USE WELDER'S GLOVES

Eye Protection:USE NO.3 OR NO. 5 SHADE SAFETY GLASSES

Other Protective Equipment:RESISTANT CLOTHING AS NECESSARY TO PREVENT  
SKIN CONTACT. AN EMERGENCY EYEWASH AND SHOWER SHOULD BE AVAILABLE.

Work Hygienic Practices:WASH HANDS THOROUGHLY WITH SOAP AND WATER  
BEFORE EATING, DRINKING, SMOKING OR USING TOILET FACILITIES.

Supplemental Safety and Health

PRODUCT NOT A HAZARD AS SHIPPED/STORED. HAZARD OCCURS WHEN USED IN  
WELDING. ARC SPRAY FUMES

AND GASES CANNOT BE CLASSIFIED SIMPLY. THE

COMPOSITION AND QUANTITY ARE DEPENDENT UPON THE METAL BEING SPRAY  
ED.

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

HCC:N1

Boiling Pt:B.P. Text:NOT GIVEN

Melt/Freeze Pt:M.P/F.P Text:>1,300C

Vapor Pres:NOT GIVEN

Vapor Density:NOT GIVEN

Spec Gravity:NOT GIVEN

Evaporation Rate & Reference:NOT GIVEN

Solubility in Water:INSOLUBLE

Appearance and Odor:GREY POWDER, NO ODOR

Percent Volatiles by Volume:NIL

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Stability and Reactivity Data =====

Stability Indicator/Materials to Avoid: YES

ACIDS. CONTACT WITH ACIDS WILL PRODUCE FLAMMABLE HYDROGEN GAS.

Stability Condition to Avoid: AVOID CREATING DUST. FINE POWDER MAY  
IGNITE DURING MECHANICAL TREATMENT.

Hazardous Decomposition Products: CARBON MONOXIDE, CARBON DIOXIDE,  
OXIDES OF NITROGEN, OZONE, TUNGSTEN OXIDES, COBALT OXIDES, IRON  
OXIDE, CARBIDE

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

Waste Disposal

Methods: PREVENT WASTE FROM CONTAMINATING SURROUNDING  
ENVIRONMENT. DISCARD ANY PRODUCT, RESIDUE, DISPOSAL CONTAINER OR  
LINER IN ACCORDANCE WITH ALL FEDERAL, STATE AND LOCAL REGULATIONS.  
PRODUCT MAY BE RECLAIMED OR RECYCLED THROUGH METAL RECYCLER.

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