SAFETY DATA SHEET

DRY CHARGED BATTERY

SECTION 1: IDENTIFICATION	
MANUFACTURER'S NAME:	TELEDYNE BATTERY PRODUCTS
ADDRESS:	840 WEST BROCKTON AVENUE, REDLANDS, CA 92374
TELEPHONE:	909-793-3131
24-HOUR EMERGENCY CONTACT:	INFOTRAC 1-800-535-5053, CUSTOMER ID: 78604
SDS/PRODUCT NAME:	BATTERY, ELECTRIC STORAGE DRY
TRADE NAME:	TELEDYNE BATTERY, GILL AIRCRAFT BATTERY, BIG BEAM, AIR TRACTOR
SYNONYMS:	GE-50, GE-51, GE-54, G-25, G-35, G-35M, G-88, G-240, G-241, G-242, G-243, G-244, G-245, G-246, G-246AT, G-247, G-6381, G-639, G-640, G-641, M83769/1-1, M83769/2-1, M83769/3-1, M83769/4-1, M83769/5-1, M83769/6-1, T-1100, T-1100L, T-2200, T-2200L, T-6200, T-6200L, L640, L6100, L6100S.
CHEMICAL NAME:	LEAD AND LEAD COMPONENTS
FORMULA:	NOT APPLICABLE
INTENDED USE:	ELECTRIC STORAGE BATTERIES FOR AIRCRAFT, EMERGENCY LIGHTING, GROUND SUPPORT AND ENGINE STARTING EQUIPMENT. CONTAINS NO ELECTROLYTE. SAFETY DATA SHEET FOR LEAD-ACID BATTERY APPLIES WHEN FILLED AND SERVICED WITH ELECTROLYTE.

SECTION 2: HAZARD(S) IDENTIFICATION

GHS-US CLASSIFCATION

ACUTE TOXICITY 4 (Oral)
ACUTE TOXICITY 4 (INHALATION)
GERM CELL MUTAGENICITY 2
CARCINOGENNICITY 1A
REPORDUCTIVE TOXICITY 1A
SPECIFIC TARGET ORGEN TOXICITY – REPEATED EXPOSURE 1

GHS-US LABELING
HAZARD PICTOGRAMS

SIGNAL WORD
DANGER

HAZARD STATEMENT
HARMFUL IF SWALLOWED OR IF INHALED. SUSPECTED OF CAUSING GENETIC DEFECTS. MAY CAUSE CANCER. MAY DAMAGE FERTILITY OF THE UNBORN CHILD. CASUSES DAMAGE TO ORGANS THROUGH PROLONGED OR REPEATED EXPOSURE.

PRECAUTIONARY STATEMENTS
WASH HANDS THOUGHLY AFTER HANDLING. DO NOT EAR, DRINK OR SMOKE WHEN USING THIS PRODUCT. USE ONLY OUTDOORS OR IN A WELL VENTILATED AREA. OBTAIN SPECIAL INSTRUCTIUONS BEFORE USE. DO NOT HANDLE UNTIL ALL SAFETY PRECAUTIONS HAVE BEEN READ AND UNDERSTOOD. WEAR PROTECTIVE GLOVES/PROTECTIVE CLOTHING EYE PROTECTION/FACE PROTECTION. DO NOT BREATH DUST/FUME/GAS/MIST/VAPORS/SPRAY. IF EXPOSED OR CONCERNED: GET MEDICAL ADVICE/ATTENTION. IF SWALLOWED: CALL A POISON CENTER/DOCTOR, IF YOU FEEL UNWELL. RINSE MOUTH. IF INHALED: REMOVE PERSON TO FRESH AIR AND KEEP COMFORTABLE FOR BREATHING. CALL A POSION CENTER/DOCTOR IF YOU FEEL UNWELL. STORE SECURELY DISPOSE OF CONTENTS AND CONTAINER IN ACCORDANCE WITH ALL LOCAL, REGIONAL, NATIONAL AND INTERNALTIONAL REGULATIONS.

ROUTES OF EXPOSURE	
INHALATION	LEAD DUST, VAPOR OR FUME MAY BE ABSORBED BY THE RESPIRATORY SYSTEM AND CAN RESULT IN BOTH ACUTE AND CHRONIC OVEREXPOSURE AS WELL AS RESPIRATORY IRRITATION.
SKIN CONTACT	LEAD IS NOT READILY ABSORBED THROUGH THE SKIN.
EYE CONTACT	LEAD DUST, VAPOR OR FUME MAY CAUSE IRRITATION.
INGESTION	LEAD DUST, VAPOR OR FUME MAY BE ABSORBED THROUGH THE DIGESTIVE SYSTEM AND CAN RESULT IN BOTH ACUTE AND CHRONIC OVEREXPOSURE.

CARCINOGENICITY	IARC	NTP	OSHA
LEAD	X		X
ARSENIC	X	X	X

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

MATERIAL OR COMPONENT	CAS #	WEIGHT %	OSHA PEL	ACGIH TLV	OSHA ACTION LEVEL
LEAD AND LEAD COMPOUNDS	7439-92-1	<95	50 µg/m^3	0.15 mg/m^3	30 µg/m^3
ANTIMONY	7440-36-0	<1.1	0.5 mg/m^3	0.5 mg/m^3	Not Applicable
ARSENIC	7440-38-2	<0.1	10 µg/m^3	0.2 mg/m^3	5 µg/m^3
BARIUM SULFATE	7727-43-7	<0.2	5 mg/m^3 **	10 mg/m^3	Not Applicable
CALCIUM COMPOUNDS	7440-70-2	<0.1	5 mg/m^3*	2 mg/m^3*	Not Applicable
CARBON BLACK EXTRACTS	1333-86-4	<0.1	3.5 mg/m^3	3.5 mg/m^3	Not Applicable
TIN COMPOUNDS	7440-31-5	<0.3	2 mg/m^3	2 mg/m^3	Not Applicable

* As CaO ** Respirable

SECTION 4: FIRST AID MEASURES

EYES	(DRY OXIDE) WASH IMMEDIATELY WITH LARGE AMOUNTS OF WATER, LIFTING THE LOWER AND UPPER LIDS CONTINUOUSLY. GET MEDICAL ATTENTION.
SKIN	NOT A DIRECT ROUT OF ENTRY.
INHALATION	REMOVE EMPLOYEE FROM AREA OF EXPOSURE. GET IMMEDIATE MEDICAL ATTENTION.
INGESTION	GET IMMEDIATE MEDICAL ATTENTION.

SECTION 5: FIRE-FIGHTING MEASURES

FLASH POINT	N/A FOR LEAD	675 ºF FOR POLYPROPYLENE CASE
AUTO IGNITION TEMPERATURE	N/A	
FLAMMABLE LIMITS IN AIR (% BY VOL)	N/A	
EXTINGUISHING MEDIA	USE HALON, DRY CHEMICAL EXTINGUISHER. BATTERY CASE WILL BURN.	
SPECIAL FIRE FIGHTING PROCEDURES	USE OF WATER IN EXTINGUISHING BURNING BATTERIES MAY CAUSE SPLATTERING DUE TO THE PRESENCE OF MOLTEN LEAD.	
UNUSUAL FIRE AND EXPLOSION HAZARD	WHILE BATTERY IS BEING CHARGED, HYDROGEN GAS IS PRODUCED. BATTERY MAY EXPLODE IF HYDROGEN GAS IS TRAPPED INSIDE THE BATTERY CASE. KEEP IGNITION SOURCES AWAY.	

SECTION 6: ACCIDENTAL RELEASE MEASURES

SPILLED OR RELEASED	SHOULD A BATTERY BREAK OPEN, ISOLATE THE AREA. PICK UP AND CONTAINERIZE ALL BATTERY PARTS AND MATERIALS. LIMIT PERSONAL EXPOSURE WITH GLOVES, EYE AND FACE PROTECTION. WHEN A BATTERY IS BEING FILLED WITH SULFURIC ACID ELECTROLYTE, ISOLATE THE AREA SHOULD A BATTERY BREAK OPEN. ELECTROLYTE SHOULD BE ABSORBED WITH A NON-ORGANIC TYPE ABSORBENT SUCH AS DRY SAND OR EARTH. AVOID DILUTION WITH WATER. LEAD SPILLED FROM THE BATTERY SHOULD BE HEPA VACUUMED OR WET MOPPED, DO NOT DRY SWEEP OR USE COMPRESSED AIR.

SECTION 7: HANDLING AND STORAGE

HANDLING AND STORAGE	EXERCISE CAUTION IN HANDLING AND STORAGE DUE TO WEIGHT OF UNITS.

OTHER PRECAUTIONS	USE CAUTION WHEN FILLING UNITS WITH ELECTROLYTE (BATTERY ACID, DILUTE SULFURIC ACID). WEAR ACID RESISTANT PLASTIC OR RUBBER GLOVES, EYE PROTECTION, APRON AND BOOTS. MATERIAL SAFETY DATA SHEET FOR LEAD–ACID BATTERY APPLIES WHEN FILLED WITH SULFURIC ACID ELECTROLYTE.
VENTILATION REQUIREMENTS	BATTERY CHARGING AREAS MUST BE ADEQUATELY VENTILATED TO PREVENT HAZARDOUS CONCENTRATIONS OF FLAMMABLE GAS OR ACID MIST. DESIGN CRITERIA FOR VENTILATION SYSTEMS ARE CONTAINED IN THE INDUSTRIAL VENTILATION MANUAL PUBLISHED BY THE ACGIH.

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

RESPIRATORY	UNDER NORMAL CONDITIONS OF USE RESPIRATORY PROTECTION IS NOT REQUIRED. HOWEVER, SHOULD CONDITIONS ARISE WHERE RESPIRATORS ARE NEEDED, USE ONLY NIOSH/MSHA RESPIRATORS APPROVED FOR DUST, FUME AND MIST.
EYE	CHEMICAL GOGGLES, FULL FACE SHIELD.
SKIN	GLOVES APPROVED FOR SULFURIC ACID.
OTHER	ACID RESISTANT APRON.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

BOILING POINT	LEAD	3164 ºF (1740 ºC) @ 760 mm Hg
MELTING POINT	LEAD	621 ºF (327.43 ºC)
	POLYPROPYLENE	320 ºF (160 ºC)
SPECIFIC GRAVITY	LEAD	11.34
VAPOR PRESSURE	LEAD	NEGLIGIBLE
VAPOR DENSITY	LEAD	N/A
SOLUBILITY	LEAD	INSOLUBLE IN WATER
% VOLATILES BY VOL	LEAD	NEGLIGIBLE
%EVAPORATION RATE	LEAD	N/A
PH	LEAD	NA
APPEARANCE AND ODOR	NO ODOR. BATTERY CASE IS PINK, CLEAR, OFF-WHITE, OR BLACK.	

SECTION 10: STABILITY AND REACTIVITY

CONDITIONS CONTRIBUTING TO INSTABILITY	NONE
INCOMPATIBILITY	CONTACT OF LEAD WITH STRONG OXIDIZERS MAY LIBERATE HYDROGEN GAS.
HAZARDOUS DECOMPOSITION PRODUCTS	NONE
CONDITIONS CONTRIBUTING TO HAZARDOUS POLYMERIZATION	WILL NOT OCCUR

SECTION 11: TOXICOLOGICAL INFORMATION

ACUTE OVEREXPOSURE	ACUTE UNTREATED OVEREXPOSURE TO LEAD MAY LEAD TO WEAKNESS, VOMITING, LOSS OF APPETITE, UN-COORDINATED BODY MOVEMENTS, CONVULSIONS, STUPOR AND POSSIBLY COMA.
CHRONIC OVEREXPOSURE	CHRONIC UNTREATED EXPOSURE TO LEAD MAY CAUSE WEAKNESS, INSOMNIA, HYPERTENSION, AND SLIGHT IRRITATION TO SKIN AND EYES, METALLIC TASTE IN MOUTH, ANEMIA, CONSTIPATION, HEADACHE, MUSCLE AND JOINT PAINS, NEUROMUSCULAR DYSFUNCTION, POSSIBLE PARALYSIS, ENCEPHALOPATHY AND PNEUMOCONIOSIS. LEAD EXPOSURE CAN POSE RISK TO DEVELOPING FETUSES AND MAY ALSO IMPAIR THE REPRODUCTIVE SYSTEMS IN BOTH MEN AND WOMEN. DAMAGE TO THE KIDNEYS, HEMATOPOIETIC AND/OR CENTRAL NERVOUS SYSTEM MAY OCCUR.

SECTION 12: ECOLOGICAL INFORMATION

LEAD IS PERSISTENT IN THE ENVIRONMENT AND ACCUMULATES IN SOILS AND SEDIMENTS THROUGH DEPOSITION FROM AIR SOURCES, DIRECT DISCHARGE OF WASTE STREAMS TO WATER BODIES, MINING, AND EROSION. ECOSYSTEMS NEAR POINT SOURCES OF LEAD DEMONSTRATE A WIDE RANGE OF ADVERSE EFFECTS INCLUDING LOSSES IN BIODIVERSITY, CHANGES IN COMMUNITY COMPOSITION, DECREASED GROWTH AND REPRODUCTIVE RATES IN PLANTS AND ANIMALS, AND NEUROLOGICAL EFFECTS IN VERTEBRATES.

SECTION 13: DISPOSAL CONSIDERATION

BATTERY PARTS MAY BE RECYCLED BY AN EPA-PERMITTED SECONDARY LEAD SMELTING FACILITY OR DISPOSED OF AS HAZARDOUS WASTE PURSUANT TO RCRA REQUIREMENTS.

SECTION 14: TRANSPORTATION INFORMATION

US DOT DESCRIPTION FOR GROUND TRANSPORT:	NOT SUBJECT TO DOT REQUIREMENTS.
IATA / ICAO:	NO RESTRICTIONS

SECTION 15: REGULATORY INFORMATION

PROPOSITION 65 WARNING

⚠ WARNING: BATTERY POSTS, TERMINALS AND RELATED ACCESSSORIES CAN EXPOSE YOU TO CHEMICALS INCLUDING LEAD AND LEAD COMPOUNDS, WHICH ARE KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER AND BIRTH DEFECTS OR OTHER REPRODUCTIVE HARM. WASH HANDS AFTER HANDLING. FOR MORE INFORMATION GO TO www.P65Warnings.ca.gov

SARA TITLE III

THE CHEMICALS LISTED BELOW ARE TOXIC CHEMICALS SUBJECT TO THE REPORTING REQUIREMENTS OF SECTION 313 OF TITLE III OF THE SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT OF 1986 AND 40 CFR PART 372.

THIS LEAD-ACID BATTERY IS CLASSIFIED AS A MANUFACTURED ARTICLE (40 CFR 372.3) AND THE HAZARDOUS MATERIALS (LEAD, ANTIMONY, ARSENIC AND NICKEL COMPOUNDS) CONTAINED WITHIN ARE NOT RELEASED UNDER NORMAL CONDITIONS OF USE. SINCE THESE CHEMICALS ARE NOT RELEASED DURING NORMAL USE THEY ARE EXEMPT FROM THE REPORTING REQUIREMENTS CONTAINED IN 40 CFR PART 372 SUBPART B. HOWEVER, SULFURIC ACID MAY BE RELEASED

INTO THE ENVIRONMENT IF A BATTERY BREAKS AND THEREFORE MAY NOT BE EXEMPT FROM THE REPORTING REQUIREMENTS OF SARA TITLE III. SEE EXEMPTIONS, 40 CFR 372.38 (b).

SECTION 16: OTHER INFORMATION

THE INFORMATION CONTAINED HEREIN IS BASED ON DATA CONSIDERED ACCURATE. HOWEVER, NO WARRANTY IS EXPRESSED OR IMPLIED REGARDING THE ACCURACY OF THESE DATA OR THE RESULTS TO BE OBTAINED FROM THE USE THEREOF. VENDOR ASSUMES NO RESPONSIBILITY FOR INJURY TO VENDEE OR THIRD PERSON PROXIMATELY CAUSED BY ABNORMAL USE OF THE MATERIAL EVEN IF REASONABLE SAFETY PROCEDURES ARE FOLLOWED. FURTHERMORE, VENDEE ASSUMES THE RISK IN THIS USE OF THE MATERIAL.

TBP NOTIFICATION

THIS PRODUCT DOES NOT CONTAIN THE ELEMENT MERCURY. THIS IS A ***MERCURY-FREE PRODUCT.***

PRECAUTIONARY STATEMENTS

SHOULD A BATTERY BREAK OPEN AND A LEAD SPILL OCCURS, PRECAUTIONS SHOULD BE TAKEN TO PREVENT LEAD DUST FROM BECOMING AIR BORNE. INDIVIDUALS SHOULD WEAR RESPIRATORY PROTECTION, PROTECTIVE CLOTHING, RUBBER GLOVES AND EYE PROTECTION IF CONDUCTING A LEAD SPILL CLEAN-UP.

AVOID THE USE OF NON-INSULATED TOOLS. IF THEY ARE REQUIRED, TAKE CARE NOT TO MAKE A CONNECTION BETWEEN THE TWO BATTERY TERMINALS AS SEVERE SPARKING MAY OCCUR WHICH COULD RESULT IN AN EXPLOSION. RINGS, METAL WATCH BANDS, NECKLACES AND OTHER JEWELRY SHOULD BE REMOVED WHILE SERVICING BATTERIES.

SUFFICIENT VENTILATION SHOULD BE PROVIDED IN ALL WORK AREAS TO PREVENT A BUILD UP OF DANGEROUS GASES. IF THE BATTERY ROOM IS AIR CONDITIONED AS PART OF AN OVERALL BUILDING SYSTEM, THE EXHAUST AIR FROM THE BATTERY ROOM SHOULD NOT BE RETURNED TO THE AIR DISTRIBUTION SYSTEM. THE ROOM SHOULD HAVE ITS OWN EXHAUST SYSTEM CONNECTED DIRECTLY TO OUTSIDE AIR. HYDROGEN AND OXYGEN GASES ARE PRODUCED DURING NORMAL BATTERY OPERATION, ESPECIALLY DURING CHARGING. HYDROGEN GAS IS LIGHTER THAN AIR, COLORLESS, ODORLESS AND TASTELESS, THEREFORE IT IS DIFFICULT TO DETECT WITHOUT SPECIAL EQUIPMENT. ALWAYS ASSUME THAT SMALL AMOUNTS OF GASES ARE PRESENT AND TAKE ALL NECESSARY PRECAUTIONS.

THIS INFORMATION SHOULD BE INCLUDED IN ALL SDS' THAT ARE COPIED AND DISTRIBUTED FOR THIS MATERIAL.

UPDATED BY: ENVIRONMENTAL / HEALTH AND SAFETY DEPARTMENT
AUGUST 2018