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	MATERIAL	SAFEITL	JATA SHEL		
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	ates Pro Series II Mo	del Rockel Moto			
PRODUCT NUMBER: TRADE NAME: Estes Pro Series	II Model Rocket	1	and the second second		
Motors			61	125122	7
GENERAL USE: Model Rocket Propulsion CHEMICAL FAMILY: Insensitive Explosive (Class 1.4)		ESTES.			
			INDUSTRIES		
PRODUCT DESCRIPTION:			IND	USIRIE	<u> </u>
Plastic black cylinders with little odo	<u>.</u>	DATE PREPA	RED: No	ovember 14, 2011	
MANUFACTURED FOR:	atulan	SUPERSEDE	S Ne	w issue	nie – 1929–192 Songel († 1999–1920) Songel († 1999–1920)
Estes-Cox Corp. d/b/s Estes Indu ADDRESS (NUMBER, STREET, P.		TELEPHONE	NUMBER FOR GI	ENERAL INFORMAT	ION
ADDRESS (NUMBER, STREET, P. 1285 H Street, PO Box 227	y. suny		7	19-372-6665	
ICITY, STATE AND ZIP CODE)	COUNTI	CHEM	TEL 24-HOUR EN	AERGENCY TELEPH	ONE NUMBER
Penrose. CO 81240	USA	ChemTe		1-800-255-3924	01-813-248 Internatio
		Commission (SCC	No No	orth America Toll Free	Internauc
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WARNINGI THIS DEVICE CONTA MECHANICAL IMPACT MAY DEF fire conditions. Metal oxides and ch young children and pats. Adult supel Ignition of product when confined m POTENTIAL HEALTH EFFE INHALATION: Normal handling of the unused prov which may cause temporary slight i SKIN: Unlikely to cause irritation to skin. F EYES: Unlikely to cause irritation to eyes; INGESTION: Ingestion of product is highly unlike CARCINOGENICITY: Hexavalent Chromium is present ir Magnesium Metal Aumonium Perchiorate Aluminum Metal Magnesium Metal Zinc Metal Zinc Matal Copper Chromite	INS A FAST BURNIN ORM PRODUCT. Indi lorides, oxides of nitro ervision is strongly end and lorides, oxides of nitro ervision is strongly end and logitation is strongly end ervision to the respiration of the respiration of pri- ety. Components of pri- trace amounts. (IAR SECTION 3 % (wi) CAS NR 7780-5 NR 7439-4 NR 7440-1 NR 7440-1 NR 7767-5 NR 7740-5 NR 7440-1 NR 7740-5 NR 7740-5 NR 7440-1 NR 7740-5 NR 7740-5 NR 7440-1 NR 7740-5 NR 77	GHARGE. KEE     idual cartridges r     gen, carbon, and     auraged when pn     prure. Use only in     that is a     roduct may cause     iculates from use     oduct are harmful     Group 1, Califon     HAZARDOU     K     EINECS #     8-9 232-236-1 0-5 231-072-3 6-4 231-175-3 10-9 234-634-6 9-1 231-818-8 14-9 231-722-6	P AWAY FROM F nay ignite if the uni- hydrogen chloride oduct is used. Proot the appropriate m the product is use rare occurrence w e thermal burns. d product may cau and will cause irri- hia Proposition 65, S.MOREDIEN EU Hazard Sy E, O+ F F N+ O, Xi, O, Xi,	FIRE AND HEAT SOL it is exposed to extrem may be formed. Kee duct contents are harn nanner as directed by ed, particles and vapou- when the product is us use imitation. itation to gastro-intesti , NTP) ITS EL ymbol(s) EL (Full T L XI RB, D	p out of the rea mult by ingestio supplier. rs may be gene ed as directed. nal tract. I RISK PHRAS ext Sections 15 R2, R9 R16, R17 R16, R17

Communication Standard (29 CFR 1910.1200), the Canadian Workplace Hazardous Materials Materials Individual Ingredient. Unitated Ingredients are not Directives. Hazard symbols and risk phrases are based on maximum listed concentration of each hazardous ingredient. Unitated Ingredients are not "hazardous" per the OSHA Hazard Communication Standard (29 CFR 1910.1200), the Canadian Workplace Hazardous Materials Information System "hazardous" per the OSHA Hazard Communication Standard (29 CFR 1910.1200), the Canadian Workplace Hazardous Materials Information System "hazardous" per the OSHA Hazard Communication Standard (29 CFR 1910.1200), the Canadian Workplace Hazardous Materials Information System "(M+MIS) or the European (GHS) directives and are considered Irade secrets under US Federal Law (28CFR and 40CFR), Canadian Law (Health Canada Legislation), and European Union Directives.

## Page 2 of 5 MATERIAL SAFETY DATA SHEET Estes Pro Series II Model Rocket Motors PRODUCT NAME: PRODUCT NUMBER: INHALATION If symptoms of lung initiation occur (coughing, wheezing or breathing difficulty), remove from exposure area to fresh air immediately. Get medical attention in the unusual event of severe distress. FYES Remove contact lenses, then wash for 15 minutes with clean potable water lifting upper and lower lids occasionally. Seek medical attention if irritation persists. SKIN: Wash with plenty of soap and water. Seek medical attention if delayed dermatitis develops (a rare condition). INGESTION Contact medical authorities immediately. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs naturally, have victim lean forward to avoid aspiration of regurgitant. Give 1-2 glasses of water to victim if victim is conscious and able to swallow and seek immediate medical assistance. Never give anything by mouth to an unconscious person. Notes to Physician: This product contains nitrates and perchibrates, as well as copper and chromium saits. This combination poses potential toxicity for a variety of organs; the kidneys, thyroid, liver, and hematopolatic systems are especially vulnerable in acute poisonings. The use of gastric lavage and/or dialysis may be of value, especially as these substances are bound within a polymer. 後年の時代の時間の時間が認識を「三吋形の」「座する」に、第三〇「Lan」「座山」ろう」という主人での時間には一座の時間である。 GENERAL HAZARDS Flammability Classification: (defined by 29 CFR 1910.1200) Class 1.4 Explosive. Can rapidly burn and/or rupture containers under fire conditions, individual devices will randomly burn and/or deflagrate. Product will not mass explode if multiple devices are involved. Burning material may produce toxic and irritating vapors. See Emergency Response Guidebook for further information. Mechanical impacts or electrical discharges are unlikely to cause product to ignite. EXTINGUISHING MEDIA: Where large quantities are affected, flood area with water; if fire is already consuming product, incident command should base fire-fighting decisions on capabilities and total quantity of product. If no water is available, carbon dioxide, dry chemical or earth may be used. FIRE FIGHTING PROCEDURES: In case of fire, use normal fire fighting equipment. Protection concerns must also address the potential of the physical characteristic of this product as a deflegrator. Quarantine area for fires involving large quantities of product. UNUSUAL FIRE AND EXPLOSION HAZARDS: If fire reaches a large quentity of product, consider a withdrawal of personnel to a safe distance. Evacuate all persons, including emergency responders from the area for at least 500 feet (1/10 mile) in all directions. HAZARDOUS COMBUSTION PRODUCTS: Carbon Monoxide, Carbon Dioxide, Nilrogen Oxides, Hydrogen Chloride, Metal Oxides, Metal Chlorides 時に、特別の時間の数名ミライルの以下に行入りの回目が広告戦者にあるよう手術化されたリジルミンが確認がない。 STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Model rocket motors are devices in a solid state. Simply pick up and place in containers approved for storage and transport. Wipe up any dust with a wet cloth. IF PRODUCT IS DAMAGED, DO NOT USE PRODUCT; DISCARD IN ACCORDANCE WITH LOCAL, STATE, AND FEDERAL REGULATIONS. SEE SECTION 13. MARSEGIIONMACHANDEINGNANDISI.ORACE MARA PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE: HANDLING: Product may burn/rupture if exposed to extreme heat. Do not smoke while handling product. DO NOT ATTEMPT TO DISMANTLE PRODUCTI! Do not eat or drink while handling this product. STORAGE: Avoid storage near extreme heat, ignition sources or open flame. Store at 32° - 140° F (0°-60° C). Store away from living quarters. Do not store with foodstuffs Do not store with flammable liquids or other incompatible materials (see Section 10). CONDITIONS TO AVOID: Heat/flame/sparks, Severe mechanical impact (which may deform product, rendering it unsafe for use).

## MATERIAL SAFETY DATA SHEET

Page 3 of 5

RODUCT NAME:	Estes Pro Series II	Model Rocket Motors			
RODUCT NUMBER:			$(x, y, y, z) = f_0 + c = o^2 c (a)$		
SE	07107123232050		NAN BELOWEGEN ON CONTRACTOR		
Hazardous Components		Support Villet	Exposure Limits		
Contraction of the second s	7429-90-5	1 mo/m3	5 mg/m3		
luminum Metal	the second se	NE	5 mg/m3 as Chromium		
opper Chromite	12018-10-9	15 mg/m3	15 mg/m3		
iulfur Sraphite	7782-42-5	2 motm3	2.5 mg/m3 (respirable dust)		
unn.	7440-66-6	0.1 mg/m3 respirable, 2	mg/m3 inhatable per DFG (Germany)		
Inte: Components not listed	have no Exposure Limits	published by ACGIH and/or OSI	HA.		
ERSONAL PROTECT					
ESPIRATORY PROTECTIO					
vapor respirator may be ad	visable or required under	emergency conditions.			
ROTECTIVE GLOVES:	nouble of require				
Vone generally required.					
THE DESCRIPTION.					
the rection the National At	enriation of Rockelry (N	AR) Model Rocketry Safety Code	e and all applicable laws and regulations.		
OTHER PROTECTIVE CLOI	HING OR FOURPMENT				
Not required when product is	used as directed by man	ufacturer.			
MODIC LUNCHEANC BRACTI	AEC.				
· · · · · · · · · · · · · · · · · · ·	milian Do not employ wh	nile handling product; eating and	drinking are also to be avoided.		
Avoid Disatilling tomes north	100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100	23103 STORY 1210 18 0 21 - 1/100 11			
		CONDITIONS TO AVOID	D:		
DESCRIPTION:	ter Annonanan	Not applicable.			
Little or No Odor - See Note	io: Appaalance.	SPECIFIC GRAVITY (M	VATER = 1)		
pH		Not applicable			
Not applicable.		SOLUBILITY IN WATER			
MELTING POINT			nents are soluble in water		
Not applicable.		VISCOSITY			
FLASH POINT Not applicable. Explosive if c	and under fire condili				
FLAMMABLE LIMITS	Dimited drives the content	VAPOR DENSITY (AIR	= 1)		
	LICT - Mana	Not applicable.			
LEL: None AUTOIGNITION TEMPERA	UEL: None	EVAPORATION RATE	(WATER = 1)		
	IUNE		Not applicable.		
NR VOLATILE ORGANIC COM	DOLIND A/OCI INFORM				
	PODIO (VOC) III OIIII				
Not applicable. NOTES: Appearance and	Odor Plastic black cylinc	ters with little odor.			
NOTES: Appearance and	SECOND	CINESSON HOLD OF MIDES			
	SEGRAM	ICONDITIONS TO AVO	ID:		
STABILITY:	the and appending	Extreme heat: extreme	Extreme heat; extreme mechanical impacts.		
Stable under normal temper	BUIES BID PESSUE.				
INCOMPATIBILITY (MATER Acids, Toxic substances, Cl	(ALS ICAVOID).	Strong ovidizers			
HAZARDOUS DECOMPOS	ITION OR BTFRODUCT	Hudmann Chlorida Metal Oxide	es, Metal Chlorides under fire conditions only.		
Carbon Monoxide, Carbon	Dioxide, Milrogen Oxides,	ICONDITIONS TO AVO	ID:		
HAZARDOUS POLYMERIZ		Ninen minted in notyme	rization.		
Will not occur.		Z COM LONG THE ALE TO A BUILT	OPMATION		
		are harmful; ingestion of used pr	oduct is highly unlikely.		
Oral LDate and inn		are naminut, mydston or used pr	particles may cause themal burns.		
Dermal LD <sub>50</sub>	Product is unlikely	IO CAUSO SKIT ITTRAUON. Igined L	n deployed product may be irritating or harmful.		
inhalation LC <sub>M</sub>	Unused product is	namess. vapors/paracles ion	iles and vapors from ignited product are possibly		
Irritation	Not a skin or eye	initant in unused form. Particula ind respiratory system in unusua	The air arbuic rain Bure har and be		

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PRODUCT NAME: PRODUCT NUMBER:	AND A REAL PROPERTY OF A	lei Rocket Motors	
Antonio	AND A REAL PROPERTY OF A		and the bar and the star
	transfer teller and and and and a search and and	LOGICAL INFORMATION COND	nued
		Cluct Components and the second second	LC60 of ingredient
Ammonium Perchiorate	CAS .	(Croj. Rat - unless otherwise specified)	(in) slavon. Ret - unless otherwi
	7790-98-9	4200 mg/kg	Not Established
Sulfur	7704-34-9	> 8437 mg/kg	Not Established
	ed have no LDS0 or LC50 dat SECTION 12-1		
No data is available on this p	and that had bath unused and a	nent motor casings may be harmful if inge	sted by animals. Collection and
tom too In town with the oral mail	one is highly solutes the soles t	and motors in water, then discard with nor	
WASTE DISPOSAL METHO	D:	f unused motors and spent motor casings	
casings in water, then discar	rd in normal trash. Residual mi SECTION 14 -	Notify the motor casing to cool before remaving steristic should be treated as potentially has TRANSPORT INFORMATION	
	DOMESTI	SHIPPING WITHIN THE USA NA0323, Class 1.45/ PG II for E30 serie	
PROPER SHIPPING NAME	use Model Rocket Motors,	ors, NA0276, Class 1.4C (See note for L	ISPS rules)
	ck Group: Class 1.4 (S or C) /		
REFERENCE: 49CFR LABEL: Explosives 1.4S		NOTES. Shinned via the United Sta	les Postal Service via Surface I
HAZARD SYMBOLS: See n	iotes for correct symbols	Only as: Toy Propellant Devices, NA series motors only. All other motors	0323, Class 1.45/ PG II for E30 will use NA0276, Class 1.4C / 1
		for shinning and may not be shippe	d by the USPS. Contact
			inning convingents for an
		manufacturer to confirm specific sh individual product.	ipping requirements for an
		individual product. ERNATIONAL SHIPPING	ipping requirements for an
PROPER SHIPPING NAME	Articles, Explosive, n. Articles, Explosive, n. Articles, Explosive, n.	Individual product. ERNATIONAL SHIPPING o.s., UN0349, Div. 1.45, PG II (E30 serie o.s., UN0351, Div. 1.46, PG II (motors e: o.s., UN0471, Div. 1.46, PG II (G80 serie	ipping requirements for an s motors) xcept G80 & E30 series) s motors)
PROPER SHIPPING NAME	Articles, Explosive, n. Articles, Explosive, n. Articles, Explosive, n. Articles, Explosive, n. ack Group: Class 1.45 / 1.40	Individual product. ERNATIONAL SHIPPING o.s., UN0349, Div. 1.45, PG II (E30 serie o.s., UN0351, Div. 1.4C, PG II (motors a: o.s., UN0471, Div. 1.4E, PG II (080 serie /1.4E PG II (Category 06 - UN0349, 06 - I	ipping requirements for an s motors) xcept GSO & E30 series) s motors)
PROPER SHIPPING NAME IMDG HAZARD CLASS / Pi	Articles, Explosive, n. Articles, Explosive, n. Articles, Explosive, n. Articles, Explosive, n. ack Group: Class 1.4S / 1.4C ack Group: Class 1.4S / PG II of	Individual product. ERNATIONAL SHIPPING o.s., UN0349, Div. 1.45, PG II (ES0 serie o.s., UN0351, Div. 1.46, PG II (motors e: o.s., UN0471, Div. 1.46, PG II (G80 serie 1.46 PG II (Category 05 - UN0349, 05 - I or 1.4C PG II or 1.4E / PG II (Ses Notes)	ipping requirements for an a motors) xcept G80 & E30 series) a motors) UN0361/0471) Em5: F-8, S-X
PROPER SHIPPING NAME IMDG HAZARD CLASS / Pi IATA HAZARD CLASS / Pa IDTADR HAZARD CLASS	Articles, Explosive, n. Articles, Explosive, n. Articles, Explosive, n. Articles, Explosive, n. ack Group: Class 1.45 / PG II / Pack Group: Class 1.45 / PI	Individual product. ERNATIONAL SHIPPING o.s., UND349, Div. 1.45, PG II (E30 serie o.s., UND351, Div. 1.46, PG II (motora e: o.s., UND471, Div. 1.4E, PG II (G80 serie 1.4E PG II (Category 05 - UND349, 05 - I or 1.4C PG II or 1.4E / PG II (See Notes) 3 II or 1.4C PG II or 1.4E / PG II, EAC=1	ipping requirements for an s motors) xcept G80 & E30 series) s motors) UN0361/0471} EmS: F-8, S-X
PROPER SHIPPING NAME IMDG HAZARD CLASS / Pi IATA HAZARD CLASS / Pa RID/ADR HAZARD CLASS TDG (Canada) HAZARD CL	Articles, Explosive, n. Articles, Explosive, n. Articles, Explosive, n. ack Group: Class 1.45 / 1.4C / k Group: Class 1.4S / PG II / Pack Group: Class 1.4S / PI LASS / Pack Group: Class 1.4	Individual product. ERNATIONAL SHIPPING o.s., UND349, Div. 1.45, PG II (E30 serie o.s., UND351, Div. 1.4C, PG II (motors e o.s., UND471, Div. 1.4E, PG II (G80 serie /1.4E PG II (Category 06 - UND349, 06 - I ar 1.4C PG II or 1.4E / PG II (See Notes) 3 II or 1.4C PG II or 1.4E / PG II, EAC=1 5 / PG II or 1.4C PG II or 1.4E / PG II III (MADENTIFICATION NIMBER:	ipping requirements for an s motors) xcept G80 & E30 series) is motors) JN0361/0471) EmS: F-8, S-X Y UN 0349 / UN 0276 / UN 0351
PROPER SHIPPING NAME IMDG HAZARD CLASS / Pa IATA HAZARD CLASS / Pa RID/ADR HAZARD CLASS TDG (Canada) HAZARD CL REFERENCE: IMDG. LABEL: Explosive, Clas	Articles, Explosive, n. Articles, Explosive, n. Articles, Explosive, n. Articles, Explosive, n. Articles, Explosive, n. ack Group: Class 1.4S / 1.4C ( / Pack Group: Class 1.4S / PG II LASS / Pack Group: Class 1.4S / PI LASS / Pack Group: Class 1.4 LATA, RID/ADR, TDG s 1.4 (C or S), CAO (1.4C on	Individual product. ERNATIONAL SHIPPING o.s., UN0349, Div. 1.45, PG II (E30 serie o.s., UN0351, Div. 1.46, PG II (motors e: o.s., UN0471, Div. 1.46, PG II (G80 serie 1.462 PG II (Category 05 - UN0349, 06 - I or 1.462 PG II or 1.462 / PG II (See Notes) 5 II or 1.462 PG II or 1.462 / PG II, EAC=1 5 / PG II or 1.462 PG II or 1.462 / PG II UN / NA IDENTIFICATION NUMBER:	Ipping requirements for an a motors) xcept G80 & E30 series) a motors) JN0361/0471) EmS: F-8, S-X Y UN 0349 / UN 0276 / UN 0351 nt (Class 1.4C/E) may not be
PROPER SHIPPING NAME IMDG HAZARD CLASS / Pri IATA HAZARD CLASS / Pa RID/ADR HAZARD CLASS TDG (Canada) HAZARD CL	Articles, Explosive, n. Articles, Explosive, n. Articles, Explosive, n. Articles, Explosive, n. Articles, Explosive, n. ack Group: Class 1.4S / 1.4C ( / Pack Group: Class 1.4S / PG II LASS / Pack Group: Class 1.4S / PI LASS / Pack Group: Class 1.4 LATA, RID/ADR, TDG s 1.4 (C or S), CAO (1.4C on	Individual product. ERNATIONAL SHIPPING o.s., UN0349, Div. 1.45, PG II (E30 serie o.s., UN0351, Div. 1.4C, PG II (motors e: o.s., UN0471, Div. 1.4E, PG II (G80 serie /1.4E PG II (Category 06 - UN0349, 06 - I or 1.4C PG II or 1.4E / PG II (See Notes) 3 II or 1.4C PG II or 1.4E / PG II , EAC=1 3 / PG II or 1.4C PG II or 1.4E / PG II UN / NA IDENTIFICATION NUMBER: IV) NOTES: motors with >30g propella shipped on a passenger alcraft; 76 Onic Alcraft (C60 Ser motors with	Ipping requirements for an s motors) xcept G80 & E30 series) s motors) JN0361/0471) EmS: F-8, S-X Y UN 0349 / UN 0276 / UN 0351 nt (Class 1.4C/E) may not be kg is the maximum load per G h <30 a of propellant, 25kg is U
PROPER SHIPPING NAME IMDG HAZARD CLASS / Pa IATA HAZARD CLASS / Pa RID/ADR HAZARD CLASS TDG (Canada) HAZARD CLASS TDG (Canada) HAZARD CLASS TDG (Canada) HAZARD CLASS TDG (Canada) HAZARD CLASS HAZARD SYMBOLS: See I I	Articles, Explosive, n. Articles, Explosive, n. Articles, Explosive, n. Articles, Explosive, n. ack Group: Class 1.45 / 1.4C / Pack Group: Class 1.45 / PG II / Pack Group: Class 1.4S / PG LASS / Pack Group: Class 1.4S / Pd LASS / Pack Group: Class 1.4 LATA, RID/ADR, TDG as 1.4 (C or S), CAO (1.4C on notes for correct symbols	Individual product. ERNATIONAL SHIPPING o.s., UN0349, Div. 1.45, PG II (E30 serie o.s., UN0351, Div. 1.4C, PG II (motors e o.s., UN0471, Div. 1.4E, PG II (G80 serie 1.4E PG II (Category 06 - UN0349, 06 - I or 1.4C PG II or 1.4E / PG II (See Notes) 3 II or 1.4C PG II or 1.4E / PG II, EAC=1 S / PG II or 1.4C PG II or 1.4E / PG II UN / NA IDENTIFICATION NUMBER: IV) NOTES: motors with >30g propella shipped on a passenger alcraft; 76 Only Alcraft (CAO). For motors will maximum load for passenger alcraft; 76 Only Alcraft (CAO). For motors will maximum load for passenger alcraft; 76 Only Alcraft (CAO). For motors will maximum load for passenger alcraft; 76 Only Alcraft (CAO). For motors will maximum load for passenger alcraft; 76 Only Alcraft (CAO). For motors will maximum load for passenger alcraft; 76 Only Alcraft (CAO). For motors will maximum load for passenger alcraft; 76 Only Alcraft (CAO). For motors will maximum load for passenger alcraft; 76 Only Alcraft (CAO). For motors will maximum load for passenger alcraft; 76 Only Alcraft (CAO). For motors will maximum load for passenger alcraft; 76 Only Alcraft (CAO). For motors will maximum load for passenger alcraft; 76 Only Alcraft (CAO). For motors will maximum load for passenger alcraft; 76 Only Alcraft (CAO). For motors will maximum load for passenger alcraft; 76 Only Alcraft (CAO). For motors will maximum load for passenger alcraft; 76 Only Alcraft (CAO). For motors will maximum load for passenger alcraft; 76 Only Alcraft; 76 O	Ipping requirements for an a motors) xcept G80 & E30 series) a motors) JN0361/0471) Em5: F-B, S-X Y UN 0349 / UN 0276 / UN 0351 nt (Class 1.4C/E) may not be i kg is the maximum load per C h S30 g of propellant, 25kg is t sft, 100 kg is the maximum for becific shipping requirements t
PROPER SHIPPING NAME IMDG HAZARD CLASS / Pa IATA HAZARD CLASS / Pa RID/ADR HAZARD CLASS TDG (Canada) HAZARD CL REFERENCE: IMDG. LABEL: Explosive, Clas HAZARD SYMBOLS: See I	Articles, Explosive, n. Articles, Explosive, n. Articles, Explosive, n. Articles, Explosive, n. Articles, Explosive, n. ack Group: Class 1.45 / 1.4C of / Pack Group: Class 1.4S / PG II of / Pack Group: Class 1.4S / PG II LASS / Pack Group: Class 1.4S / PG LASS / Pack Group: Class 1.4 IATA, RID/ADR, TDG so 1.4 (C or S), CAO (1.4C on notes for correct symbols	Individual product. ERNATIONAL SHIPPING o.s., UN0349, Div. 1.45, PG II (E30 serie o.s., UN0351, Div. 1.4C, PG II (motors e. o.s., UN0471, Div. 1.4E, PG II (G80 serie /1.4E PG II (Category 06 - UN0349, 06 - I or 1.4C PG II or 1.4E / PG II (Ses Notes) 5 II or 1.4C PG II or 1.4E / PG II (Ses Notes) 5 II or 1.4C PG II or 1.4E / PG II 1 / PG II or 1.4C PG II or 1.4E / PG II UN / NA IDENTIFICATION NUMBER: iy) NOTES: motors with >30g propalla shipped on a passenger alrcraft; 76 Only Alrcraft (CAO). For motors with maximum load for passenger alrcraft; 76 Only Alrcraft (CAO). For motors with maximum load for passenger alrcraft; 76 Only Alrcraft (CAO). For motors with maximum load for confirm sp	Ipping requirements for an s motors) xcept G80 & E30 series) s motors) JN0361/0471) EmS: F-8, S-X Y UN 0349 / UN 0276 / UN 0351 nt (Class 1.4C/E) may not be ikg is the maximum load per C h 530 g of propellant, 25kg is to st, 100 kg is the maximum for becific shipping requirements f TER 49 parts 100 - 177, IMDG

## MATERIAL SAFETY DATA SHEET

Page 5 of 5

RODUCT NAME:	Estes Pro Series II M	del Rocket Motors	
ROUGI NUMBER.	SECTION 15.	REQUINTORY MEDRIMATION	history, produced and the second
CCA (USA - Toxic Substanc	e Control Act): Component	are listed under Section8b.	
SARA TITLE III (USA - Su	perfund Amendments and	Reauthorization Act):	
Acute Health:	YES	Chronic Health:	NO
	YES	Sudden Release of Press	sure:* YES
Fire:	NO	* - Only if confined under	
Reactive:	NU DEDIENTS: Dotassium N	trate, Ammonium perchiorate, aluminum	powder
CERCLA (USA - Comprehense California Prop 65, Safe Drink State Right To Know Laws: Th CPR (Canadian Controlled Pr DL (Canadian Ingredient Dis DSL / NDSL (Canadian Dome EINECS (European Inventory WGK Water Quality Index: EUROPEAN (GHS) HAZARD EURISK PHRASES R2: Risk of explosion by sh R22: Harmful If availowed. R22/53: Harmful If availowed. R22/53: Harmful to aquatter EU SAFETY PHRASES	sive Response Compensati ing Water and Toxic Enforc the product contains chem roducts Regulations): closure List): Compon estic Substances List / Non- r of Existing Commercial Ch NA for product. SYMBOLS	on and Liability ACI; RQ=8006 pounds for p ement Act of 1986: Hexavalant chromium i locals listed on the RTK Laws of CA, FL, M Exempt under WHMIS regulations as i enta are listed in Section 2. Domestic Substances List): Listed or exemp emical Substances): 9003-55-8 0003-55-8 0003-55-8 0003-55-8	in trace amounts only. In trace amounts only. Is, Mi, MN, NJ, PA, & RI. explosive. pt on both CDSL and NDSL. not listed in EINECS or NLP.
S1/2: Keep locked up and o	Ut of the reach of shifting	NEROMATRINEORIA MONTANI	
	SECHON	N. S.A. S. L. L. Bull In Contract Association and	
HMIS HAZARD RATINGS			11 Mar - 19 - 10 - 10 - 10 - 10 - 10 - 10 - 10
	<ul> <li>And Angel and Angel and Angel</li> </ul>		
0 = INBIGNIFICANT ,1 = SLIGH 2 = MODERATE, 3 = HIGH	•		In the second
4 = EXTREME			Castlan 8
,		Personal Protective Equipment: See	ascubil o
EINECS- Europeen Inventory HMIS - Hazardous Meteriale NA - Not Avsitable , ND - NIOSH - National Institute for OSHA - Occupational Safety Full R-Phrases (Not listed I combustible material, R11 Hi	of Existing Commercial Che Identification System, IARC Not Determined, NE - Occupational Safety and He and Health Administration in Section 15): R8 Contect ighly flammable.R15 Contect	lenists, CAS - Chemical Abstracts Service nical Substances - International Agency for Research on Can Not Established, NR - Not Reported (th, NTP - National Toxicology Program with combustible material may cause fire. RS 4 with water liberates extramely flammable g 6/37/38 irritating to eyes, respiratory system in the aquatic environment. R52/53 Hamfu	eer Explosive when mixed with pases. R17 Spontaneously flammat and skin. R50/53 Very toxic to
long-term adverse effects in	the aquatic environment.		
REVISION SUMMARY:	New Issue 10/20/2011.	B	
MSDS Prepared by: ChemTel Inc.		김 영화 이 이 이 이 이 이 이 이 이 이 이 이 이 이 이 이 이 이	
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Website: www.chemtelinc.co	m		ter second interest worth information and interest
The information contained how by the manufactural, of the production information to bulvers, applicable	in a posieved to be accurate buck and manufacturities of the lind suited to the clicumstanc	bit is not exclusingly to be to . Date and exclusing components of the product. Users die School of a of use Vanden assumes no responsibility for und gre not undfrind to an eligibility of the work of rectange undfrind to an eligibility of the second rectange and the school of the form work of rectange of the school of the school of the product is beginn in	to conting the obvious of mess that douby to worder or third parame shoet Euthernore Sortion assume it