

## MATERIAL SAFETY DATA SHEET

**PRODUCT:** Tuff Grip –

**HMIS HAZARD:** 1 0 0 X HANDLING

**1 0 0 X SPRAYING**

### SECTION I – Manufacturer Information

**Manufacturer:** Get A Grip

**Address:** C3A-2, Block C, Jalan Selaman 1, Dataran Palma

**Emergency Phone #:** NA

**Information Phone #:** +603 4270 5220

Date Prepared: March 23, 2010

### SECTION II – HAZARDOUS INGREDIENTS/IDENTITY INFORMATION

HAZARDOUS INGREDIENT	CAS #	OSHA PEL	ACGIH PEL	OTHER	%
Dipropylene glycol n butyl ether	29911-28-2	*NE	*NE	SEE VI	1.587
Propylene glycol n butyl ether	5131-66-8	*NE	*NE	SEE VI	1.587
Poly(oxy-1,2-ethanediyl) alpha[3-{3-(2H-benzotriazol-2-yl)-5-(1,1dimethylethyl)-4-hydroxyphenyl]-1-oxopropyl]-omega-hydroxy-	104810.48.2	*NE	*NE	SEE VII	0.312
Bis(1,2,2,6,6-pentamethyl-4-piperidiny)sebacate	41556-26-7	*NE	*NE	SEE VI	0.254
Poly(oxy-1,2-ethanediyl)alpha[3-{3-(2H-benzotriazol-2-yl)-5-(1,1dimethylethyl)-4-hydroxyphenyl]-1-oxopropyl]-omega-[3,(3-(2H-benzotriazol-2-yl)-5-(1,1dimethylethyl)-4-hydroxyphenyl)-1-oxopropoxy]-	10410-47-1	*NE	*NE	SEE VI	0.249
Methyl (1,2,2,6,6-pentamethyl-4-piperidiny)sebacate	82919-37-7	*NE	*NE	SEE VI	0.063
1,2 Benzisothiazol-3(2H)one	2634-33-5	*NE	*NE		0.045
ammonia	1336-21-6	25 ppm	25 ppm		0.043

### SECTION III – PHYSICAL/CHEMICAL CHARACTERISTICS

**Boiling Point:** >100°C

**Specific Gravity** (H20=1): 1.060

**Vapor Pressure** (mm Hg) NE

**Melting Point:** NE

**Vapor Density** (Air = 1) NE

**Evaporation Rate:** (Butyl Acetate=1) <0.1

**pH:** 8.0 – 9.0

**VOC:** (78g/L.) = 0.65# / Gallon

**Solubility in water :** DILUTABLE

**Appearance and Odor:** Milky yellow mobile gritty liquid with mild ether odor.

### SECTION IV – FIRE AND EXPLOSION HAZARD DATA

**Flash Point (Method Used):** NE (WATER BASED PRODUCT) **FLAMMABLE Limits:** NEL LEL –NE UEL- NE

**Extinguishing Media:** CO2 OR DRY CHEMICAL. WATER AGGRAVATES SPILL CLEANUP.

**Special Fire Fighting Procedures:** WEAR NIOSH/MSHA APPROVED PRESSURE DEMAND SELF CONTAINED BREATHING APPRATUS.

**Unusual Fire & Explosion Hazards :** MATERIAL CAN SPATTER ABOVE 100°C. DRIED FILM MAY BURN.

### SECTION V – REACTIVITY DATA

**Stability:** XX Stable \_\_\_ Unstable Conditions to Avoid: TEMPERATURES > 100C.

**Incompatibility** (materials to avoid): MATERIAL THAT REACT WITH WATER; OXIDIZERS

**Hazardous Decomposition Byproducts:** OXIDES OF CARBON AND NITROGEN AT FIRE CONDITIONS.

**Hazardous Polymerization:** \_\_\_ May occur XX Will not occur **Conditions to Avoid:** NONE KNOWN

### SECTION VI – HEALTH HAZARD DATA

**Routes of entry :** Inhalation? YES Skin? YES? Ingestion? YES

## SECTION VI – HEALTH HAZARD DATA (continued)

**Health hazards** (Acute and Chronic): **INHALATION**-(ACUTE) NAUSEA, HEADACHE, RESPIRATORY IRRITATION; (CHRONIC) PROLONGED OCCUPATIONAL EXPOSURE TO SOLVENTS HAVE BEEN ASSOCIATED WITH PERMANENT BRAIN AND NERVOUS SYSTEM DAMAGE; ALSO SEE MEDICAL CONDITIONS BELOW; **SKIN**-(ACUTE) MILD DELAYED IRRITATION; (CHRONIC) DERMATITIS; ALSO SEE MEDICAL CONDITIONS BELOW. **EYES** (ACUTE); IRRITATION. CHRONIC; SAME.

**Carcinogenicity:** NTP? NO IARC Monographs? NO OSHA Regulated? NO

**Signs and Symptoms of Exposure:** INHALATION; TRANSIENT NARCOSIS OR HEADACHE WITH PROLONGED EXPOSURE AT ELEVATED TEMPERATURES IN CONFINED AREAS. SKIN; MILD DELAYED SKIN IRRITATION EYES; TEARING, REDNESS, IRRITATION.

**Medical Conditions Generally Aggravated by Exposure:** MAY ADVERSELY AFFECT RENAL, HEPATIC, NEUROLOGICAL PROCESSES, SPLEEN AND THYROID.

**Emergency and First Aid Procedures:** INHALATION; REMOVE TO FRESH AIR, SEEK MEDICAL ATTENTION. SKIN; WASH WITH WARM SOAPY WATER AS SOON AS POSSIBLE. IF IRRITATION PERSIST, SEEK MEDICAL ATTENTION. EYES; FLUSH WITH CLEAN WATER FOR 15 MINUTES AND SEEK MEDICAL ATTENTION.

## SECTION VII – PROCEDURES FOR SAFE HANDLING AND USE:

**Steps to be taken in case material is released or spilled:** KEEP ALL SPECTATORS AWAY! WEAR NIOSH/MSHA APPROVED RESPIRATOR FOR ORGANIC VAPORS IF IN POORLY VENTILATED AREA. DIKE AND CONTAIN SPILL WITH INERT MATERIAL. RECOVER USABLE MATERIAL TO CONTAINER FOR USE. SEPARATE UNUSABLE MATERIAL. KEEP SPILLS FROM SEWERS OR WATER. ALSO SEE SECTION VIII CONTROL MEASURE.

**Water disposable method:** SPREAD MATERIAL EVENLY ON PLASTIC FILM AND ALLOW TO DRY THOROUGHLY. DISPOSE OF IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REGULATIONS.

**Precautions to be taken in handling and storing:** USE AND STORE WITH ADEQUATE VENTILATION. AVOID EYE CONTACT. KEEP CONTAINER CLOSED. PROTECT FROM FREEZING. AVOID TEMPERATURES IN EXCESS OF 45 DEGREES C.

**Other precautions:** AVOID BREATHING VAPORS, ESPECIALLY IN THE HEAD SPACE ABOVE LIQUID DELIBERATE INGESTION OR CONCENTRATING AND INHALING VAPORS MAY BE HARMFUL OR FATAL. SEE LABEL PRECAUTIONS.

## SECTION VIII – CONTROL MEASURES

**Respiratory protection:** NIOSH/MSHA APPROVED ORGANIC VAPOR CATRIDGE.

**Ventilation:** Local Exhaust: RECOMMENDED

**Mechanical (General) :** RECOMMENDED

**Special :** NA

**Other:** NA

**Protective Gloves:** IMPERVIOUS

**Eye Protection:** CHEMICAL SPLASH GOOGLES

**Other protective clothing or Equipment:** AS REQUIRED TO PREVENT SKIN CONTACT.

**Work/Hygienic Practices:** GOOD INDUSTRIAL HYGIENE.

## SECTION IX DISCLAIMER OF EXPRESSED AND IMPLIED WARRANTIES

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The information and product are furnished on the condition that the person receiving them shall make his own determination as to the suitability of the product for his particular purpose and on the condition that he assumes the risk of his use thereof.

**LEGEND:** NA = Not Applicable

NE = Not Evaluated

NR = Not Required

### **OSHA/ACGIH TERMS:**

**PEL**= Permissible Exposure Limit

**STEL** = Short Term Exposure Limit

**TWA**= Time Weighted Average

**TLV** = Threshold Limit Value

**\*NE** = Not Established

**HMIS Hazard Ranking** 0=least 1 = Slight

2 = Moderate 3 = Serious 4 = Severe

For further information on Personal Protection refer to HMIS Personal Protection Index.