MATERIAL SAFETY DATA SHEET

1. PRODUCT AND COMPANY INFORMATION

PRODUCT CODE: TO2001
TRADE NAME: **TakeOFF GREEN SEMI-PASTE PAINT AND VARNISH REMOVER**
SUPPLIER: TAKEOFF, INC.
P.O. BOX 122
GENESEO, IL 61254
PHONE: 1-800-535-5053
FAX: 1-800-452-6140

MANUFACTURER:
REFER TO SUPPLIER

EMERGENCY RESPONSE NUMBER: 1-800-535-5053

POISON INFORMATION NUMBERS: UNITED STATES 1-800-962-1253
CANADA 1-800-268-9017

2. COMPOSITION/INFORMATION ON THE COMPONENTS

COMPONENT NAME	CAS#	CONCENTRATION WT./WT.
1. ACETONE	67-64-1	15 – 40
2. METHANOL	67-56-1	15 – 40

3. HAZARD IDENTIFICATION

ROUTE OF ENTRY	Absorption, Eye contact, Ingestion, Inhalation, Skin contact.
CARCINOGENIC STATUS	Not considered carcinogenic by NTP, IARC, and OSHA
TARGET ORGANS	Eye, Skin, Lung, Liver, Kidney, Heart, Central Nervous System, Reproductive
HEALTH EFFECTS – EYE	Liquid, mist or vapor will cause conjunctival irritation and possibly corneal damage.
HEALTH EFFECTS - SKIN	Material will cause irritation. Liquid may be absorbed through the skin in toxicologically significant amounts if area of contact is large and exposure prolonged. Repeated or prolonged contact may produce defatting of the skin leading to irritation and dermatitis. Repeated and/or prolonged contact may lead to liver and/or kidney damage.
HEALTH EFFECTS - INGESTION	Aspiration during swallowing or vomiting may severely damage the lungs. Swallowing may have the following effects: irritation of mouth, throat and digestive tract. A large dose may have the following effects; kidney damage, liver damage, temporary or permanent blindness, central nervous system depression.
HEALTH EFFECTS - INHALATION	Exposure to vapor may have the following effects; eye irritation, irritation to nose, throat and respiratory tract. Exposure to vapor at high concentrations may have the following effects: dizziness, drowsiness, headache, kidney damage, liver damage, lung damage temporary or permanent blindness, central nervous system depression, cardiac sensitization leading to risk of fatal arrhythmia's adverse reproductive effects.

4. FIRST AID MEASURES

FIRST AID – EYE	Immediately flood the eye with plenty of water for at least 15 minutes, holding the eye open. Obtain medical attention if soreness or redness persists.
FIRST AID – SKIN	Immediately flood the skin with large quantities of water, preferably under a shower. Contaminated clothing should be washed or dry-cleaned before re-use. Obtain medical attention if blistering occurs or redness persists.
FIRST AID – INGESTION	Have victim drink 1 - 3 glasses of water to dilute stomach contents. Induce vomiting. If there is difficulty in breathing give oxygen. Obtain medical attention immediately.
FIRST AID – INHALATION	Remove from exposure. If there is difficulty in breathing, give oxygen. Obtain medical attention immediately.
ADVICE TO PHYSICIANS	Ethanol blocks metabolism of methanol to toxic metabolites. Initial dose 1ml/kg 50% solution, then 0.5 ml/kg 2 hourly until methanol not detectable in blood. Use gastric lavage if more than 20ml taken in last 4 hours.

5. FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA	Use water spray, foam, and dry chemical or carbon dioxide. Be aware of the possibility of re-ignition. Keep containers and surroundings cool with water spray.
SPECIAL HAZARDS OF PRODUCT	This product may give rise to hazardous fumes in a fire. Be aware of possibility of re-ignition Containers may explode in heat of fire. Vapors can travel a considerable distance to a source of ignition and flashback. Dangerous when exposed to heat or flame.
PROTECTIVE EQUIPMENT FOR FIRE FIGHTING	Wear full protective clothing and self-contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES

SPILL PROCEDURES	Contain and absorb using earth, sand or other inert material. Transfer into suitable containers for recovery or disposal.
PERSONAL PRECAUTIONS	Eliminate all sources of ignition. Vapors can accumulate in low areas. Consider need for evacuation.
ENVIRONMENTAL PRECAUTIONS	Prevent the material from entering drains or water courses. Notify authorities if spill has entered water course or sewer or has contaminated soil or vegetation.

7. HANDLING AND STORAGE

HANDLING	Use in well-ventilated area. Use local exhaust ventilation. Avoid inhaling vapor. Avoid contact with eyes, skin and clothing. Keep container tightly closed when not in use.
STORAGE	Store away from sources of heat or ignition. Storage area should be: cool, dry, well ventilated, out of direct sunlight, away from incompatible materials. Minimize exposure to air. Do not distill to near dryness.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

1. ACETONE	OSHA: PEL 1000ppm (2380mg/m³) 8h TWA ACGIH: TLV 750ppm (1780mg/m³) 8h TWA ACGIH: STEL 1000ppm (2380mg/m³) 15 min TWA UK EH40: OES 1000ppm (2380mg/m³) 8h TWA UK EH40: OES 1000ppm (2380mg/m³) 15 min TWA UK EH40: OES 750ppm (1780mg/m³) 8h TWA UK EHO: OES 1500ppm (3560mg/m³) 15 min TWA ACGIH: TLV 750ppm (1780mg/m³) 8h TWA ACGIH: STEL 1000ppm (2380mg/m³) 15 min TWA OSHA: PEL 1000ppm (2400mg/m³) 8h TWA
2. METHANOL	OSHA: PEL 200ppm (260mg/m³) 8h TWA ACGIH: TLV 200ppm (262mg/m³) 8h TWA ACGIH: STEL 250ppm (328mg/m³) 15 min TWA UK EH40: OES 200ppm (260mg/m³) 8h TWA UK EH40: OES 250ppm (310mg/m³) 15 min TWA Can be absorbed through skin. UK EH40: OES 200ppm (260mg/m³) 8h TWA UK EH40: OES 250ppm (310mg/m³) 15 min TWA Can be absorbed through skin. ACGIH: TLV 200ppm (262mg/m³) 8h TWA ACGIH: STEL 250ppm (328mg/m³) 15 min TWA Can be absorbed through skin. OSHA: PEL 200ppm (260mg/m³) 8h TWA
ENGINEERING CONTROL MEASURES	Exposure to this material may be controlled in a number of ways. The measures appropriate for a particular work site depend on how the material is used and on the potential for exposure. If engineering controls and work practices are not effective in preventing or controlling exposure, then suitable personal protective equipment, which is known to perform satisfactorily, should be used.
RESPIRATORY PROTECTION	The specific respirator selected must be based on the airborne concentration found in the workplace and must not exceed the working limits of the respirator. The following protection is recommended: Respirator equipped with an organic vapor cartridge.

HAND PROTECTION	Gloves must be worn during all handling operations.
EYE PROTECTION	Chemical goggles must be worn during all handling operations.
BODY PROTECTION	Discard contaminated protective equipment. If there is danger of splashing, wear overalls or apron.
PROTECTION DURING APPLICATION	During application, adequate ventilation must be provided. If ventilation is poor, wear respiratory protection. During application, all sources of ignition must be eliminated and adequate ventilation must be provided.

9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE	Liquid
COLOR	Clear – Green
ODOR	Chemical
PH	Neutral
SPECIFIC GRAVITY	0.8564 g/ml
COEFFICIENT OF WATER/OIL DISTRIBUTION	N/AV
BOILING POINT	61ºC/142ºF
EXPLOSION LIMITS (%)	Lower limit 1.5% Upper limit 12.0%
VAPOR PRESSURE	6 mm Hg at 20º C
SOLUBILITY IN WATER	75%
VAPOR DENSITY (AIR = 1)	2.95
EVAPORATION RATE	0.5 (referenced as n-butyl acetate=1
FREEZING POINT	N/AP
VOC (g/1)	<3
FLASH POINT (PMCC)(ºC/F)	> 66^0C/>$150F^0$

10. STABILITY AND REACTIVITY

STABILITY	Stable under normal conditions.
CONDITIONS TO AVOID	High temperatures, static discharge, all sources of ignition.
MATERIALS TO AVOID	Strong oxidizing agents, alkalis, acids, bases.
HAZARDOUS POLYMERIZATION	Will not occur.
HAZARDOUS DECOMPOSITION PRODUCTS	Oxides of carbon, formaldehyde, unidentified organic materials.

11. TOXICOLOGICAL INFORMATION

ACUTE TOXICITY	ACETONE: Oral LD50 (rat) 5800 mg/kg……..LC50:50100 mg/m³/8H METHANOL: Oral LD50 (rat) 5628 mg/kg……..LC50:64000ppm/4H
REPRODUCTIVE/ DEVELOPMENT TOXICITY	Adverse effects on the reproductive system of both sexes have been reported in laboratory animals following repeated exposure. Developmental effects have been observed in laboratory animals.

12. ECOLOGICAL INFORMATION

MOBILITY	If released to soil it will evaporate at a moderate rate. The product is poorly absorbed onto soils or sediments. The product will leach into soil. The product will dissolve rapidly in water.
PERSISTENCE/ DEGRADABILITY	The product is expected to be readily biodegradable.
BIO-ACCUMULATION	Product is not expected to bioaccumulate.
ECOTIXICITY	The product may be harmful to aquatic organisms. ACETONE: Tests on the following species gave a 96h LC50 of 5540mg.litre – rainbow trout.

13. DISPOSAL

PRODUCT DISPOSAL	Dispose of as hazardous waste. Dispose of in accordance with all applicable local and national regulations. Incineration is an acceptable method of disposal. Do not incinerate closed containers.
CONTAINER DISPOSAL	Label should not be removed from containers until they have been cleaned. Do not cut, puncture or weld on or near the container. Do not incinerate closed containers. Empty containers may contain hazardous residues. Dispose of containers with care.

14. TRANSPORTATION INFORMATION

DOT CFR 172.101 DATA	(<1.3 Gal.) Proper Shipping Name: Consumer Commodity, ORM-D
UN PROPER SHIPPING NAME	(>1.3 Gal.) Combustible Liquid n.o.s.
UN CLASS	Combustible Liquid
UN NUMBER	NA 1993
UN PACKAGING GROUP	III

15. REGULATORY INFORMATION

SARA Title III Sect. 304	ACETONE: RQ 5,000 lbs. METHANOL: RQ 5,000 lbs.
SARA Title III Sect. 311/312 Categorization	Immediate (Acute) Health Hazard Delayed (Chronic) Health Hazard Flammable
SARA Title III Sect. 313	This product contains a chemical which is listed I Section 3131 at or above de minim concentrations. The following listed chemicals are present: (quantity present is found elsewhere on this MSDS) – METHANOL (67-56-1), ACETONE (67-64-1)

CANADA WHMIS information	This product has been classified in accordance with the hazard criteria of the CPR and the MSDS contains all the information required by CPR.
WHMIS CLASSIFICATION	Class B3 Combustible Liquid Class D1A Poisonous and Infectious Material – Materials Causing Immediate and Serious Toxic Effects Class D2B Poisonous and Infectious Material – Materials Causing Other Toxic Effects

16. OTHER INFORMATION

NFPA RATINGS	NFPA CODE for Flammability 2 NFPA CODE for Health 2 NFPA CODE for Reactivity 0 NFPA CODE for Special Hazards – none
ABBREVIATIONS	N/AV: Not Available N/AP: Not Applicable CAS#: Chemical Abstracts Service Number ACGIH: American Conference of Governmental Industrial Hygienists OSHA: Occupational Safety and Health Administration TLV: Threshold Limit Value PEL: Permissible Exposure Limit STEL: Short Term Exposure Limit NTP: National Toxicology Program IARC: International Agency for Research on Cancer R: Risk S: Safety LD50: Lethal Dose 50% LC50: Lethal Concentration 50% WHMIS: Workplace Hazardous Materials Information System
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Provided data is offered in good faith as typical values and not as a product specification. No warranty, either express or implied, is hereby made. The recommended industrial hygiene and safe handling procedures are believed to be generally applicable, however, each user should review these recommendations.

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