MATERIAL SAFETY DATA SHEET

This Material Safety Data Sheet conforms to the requirements of ANSI Z400.1.
THIS MSDS COMPLIES WITH 29 CFR 1910.1200 (HAZARD COMMUNICATION STANDARD)
IMPORTANT: Read this MSDS before handling & disposing of this product. Pass this information on to employees, customers, & users of this product.

SECTION 1. CHEMICAL PRODUCT & COMPANY IDENTIFICATION / HAZARD RATINGS

PRODUCT IDENTITY: CROWN TUFF CLEAN AEROSOL
COMPANY IDENTITY: PACKAGING SERVICE CO., INC.
COMPANY ADDRESS: 1904 MYKAWA ROAD / P O Box 875
COMPANY CITY: PEARLAND, TX 77581
COMPANY PHONE: 1-281-485-1458
CHEMTREC PHONE: 1-800-424-9300

SECTION 2. COMPOSITION/INFORMATION ON INGREDIENTS

CONTAINS:
Principal Hazardous Component(s) | CAS No. | OSHA PEL | ACGIH TLV | Other Limits
--- | --- | --- | --- | ---
Propane | 74-98-6 | Unknown | 1000 ppm |
Butane | 106-97-8 | Unknown | 800 ppm |
Isopropyl Alcohol | 67-63-0 | 400 ppm | 400 ppm |
* 2-Butoxyethanol | 111-76-2 | 50 ppm | 25 ppm (skin) |
* Ammonium Hydroxide | 1336-21-6 | 50 ppm | 25 ppm | 35 ppm(STEL)

*Section 313 Supplier Notification - Indicates hazardous ingredients which are toxic chemicals subject to the reporting requirements of Section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 and of 40 CFR 372.

SECTION 3. HAZARDS IDENTIFICATION

RISK STATEMENTS:
Combustible Liquid
R65 Harmful: may cause lung damage if swallowed.
R36/37/38 Irritating to eyes, respiratory system and skin.

SAFETY STATEMENTS:
Keep away from ignition sources.
Wear proper protective equipment.

SECTION 4. FIRST AID MEASURES PROCEDURES

EYE CONTACT:
For eyes, flush with plenty of water for 15 minutes & get medical attention.

SKIN CONTACT:
In case of contact with skin immediately remove contaminated clothing. Wash thoroughly with soap & water. Wash contaminated clothing before reuse.

INHALATION:
After high vapor exposure, remove to fresh air. If breathing is difficult, give oxygen. If breathing has stopped give artificial respiration.

SWALLOWING:
If swallowed, CALL A PHYSICIAN IMMEDIATELY! Do NOT induce vomiting. Have patient lie down & keep warm. Vomiting may lead to pneumonitis, which may be fatal.

SECTION 5. FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA:
NFPA Class B extinguishers (Carbon Dioxide or foam) for Class IIIA liquid fires.

SPECIAL FIRE FIGHTING PROCEDURES:
Water spray may be ineffective on fire but can protect fire fighters & cool closed containers. Use fog nozzles if water is used. Do not enter confined fire-space without full bunker gear. (Helmet with face shield, bunker coats, gloves & rubber boots). Use NIOSH approved positive-pressure self-contained breathing apparatus.

UNUSUAL EXPLOSION AND FIRE PROCEDURES:
COMBUSTIBLE!
Keep container tightly closed. Isolate from oxidizers, heat, & open flame. Closed containers may explode if exposed to extreme heat. Applying to hot surfaces requires special precautions. Empty container very hazardous! Continue all label precautions!

**SECTION 6. ACCIDENTAL RELEASE MEASURES**

**CONTAINMENT TECHNIQUES:**
Stop spill at source. Dike area & contain.

**CLEAN-UP PROCEDURES:**
Clean up remainder with absorbent materials. Mop up & dispose of.

**SECTION 7. HANDLING AND STORAGE**

**HANDLING:**
Isolate from oxidizers, heat, & open flame. Use only with adequate ventilation. Avoid breathing of vapor or spray mist. Avoid contact with skin & eyes. Wear OSHA Standard goggles or face shield. Consult Safety Equipment Supplier. Wear gloves, apron & footwear impervious to this material. Wash clothing before reuse. Avoid free fall of liquid. Ground containers when transferring. Do not flame cut, braze, or weld. Empty container very hazardous! Continue all label precautions!

**STORAGE:**
Store large amounts in structures made for OSHA Class IIIA liquids. Keep container tightly closed & upright when not in use to prevent leakage.

**SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

**EXPOSURE CONTROLS:**
Use vapor, mist gas mask within use limits, or ventilate to keep vapors of this material below 2mg/cu m. If over TLV, in accordance with 29 CFR 1910.134, use NIOSH approved positive-pressure self-contained breathing apparatus. Consult Safety Equipment Supplier. Use explosion-proof equipment.

**VENTILATION:**
LOCAL EXHAUST : Necessary
MECHANICAL (GENERAL) : Acceptable
SPECIAL : None
OTHER : None

**PERSONAL PROTECTIONS:**
Wear OSHA Standard goggles or face shield. Consult Safety Equipment Supplier. Wear gloves, apron & footwear impervious to this material. Wash clothing before reuse.

**WORK & HYGIENIC PRACTICES:**
Provide readily accessible eye wash stations & safety showers. Wash at end of each workshift & before eating, smoking or using the toilet. Promptly remove clothing that becomes contaminated. Destroy contaminated leather articles. Launder or discard contaminated clothing.

**SECTION 9. PHYSICAL DATA**

**APPEARANCE:** Liquid, Water-White or Dyed
**ODOR:** Mild
**BOILING RANGE:** 182 191 203 C / 361 376 398 F
**AUTO IGNITION TEMPERATURE:** 260 C / 500 F (Lowest Component)
**LOWER FLAMMABLE LIMIT IN AIR (% by vol):** .9
**FLASH POINT (TEST METHOD):** 60 C / 141 F (TCC)
**FLAMMABILITY CLASSIFICATION:** Class IIIA
**GRAVITY @ 60 F: API:** 48.3
**SPECIFIC GRAVITY (Water=1):** .787
**POUNDS/GALLON:** 6.556
**VOC’S (>0.44 Lbs/Sq In)@100F:** 0.0 Vol. % / 0.0 g/L / 0.000 Lbs/Gal
**TOTAL VOC’S (TVOC):** 100.0 Vol. % / 787.0 g/L / 6.555 Lbs/Gal
**NONEXEMPT VOC’S (CVOC):** 100.0 Vol. % / 787.0 g/L / 6.555 Lbs/Gal
**HAZARDOUS AIR POLLUTANTS (HAPS):** .0 Wt. % / 0.0 g/L / 0.000 Lbs/Gal
**VAPOR PRESSURE (mm of Hg)@20 C:** .5
**NONEXEMPT VOC PARTIAL PRESSURE (mm of Hg @ 20 C):** .5
**VAPOR DENSITY (air=1):** 5.2
**WATER ABSORPTION:** Negligible
**REFRACTIVE INDEX:** 1.436
SECTION 10. STABILITY & REACTIVITY

STABILITY:
Stable
CONDITIONS TO AVOID:
Isolate from oxidizers, heat, & open flame.
MATERIALS TO AVOID:
Isolate from strong oxidizers such as permanganates, chromates & peroxides.
HAZARDOUS DECOMPOSITION PRODUCTS:
Carbon Monoxide, Carbon Dioxide from burning.
HAZARDOUS POLYMERIZATION:
Will not occur.

SECTION 11. TOXICOLOGICAL INFORMATION

MATERIAL CAS # TWA (OSHA) TLV (ACGIH) HAP
Medium Aliphatic Solvent Naphtha *64742-88-7 5 mg/m3 3 5 mg/m3 No
This product contains no EPA Hazardous Air Pollutants (HAP) in amounts > 0.1%.
Using manufacturers’ data, based on EPA Method 311, the following EPA Hazardous Air Pollutants may be present in trace amounts (less than 0.1%): Cumene,Polycyclic Aromatics
MATERIAL CAS # CEILING STEL (OSHA/ACGIH)
None Known None Known
ACUTE HAZARDS
EYE & SKIN CONTACT:
Primary irritation to skin, defatting, dermatitis. Primary irritation to eyes, redness, tearing, blurred vision. Liquid can cause eye irritation. Wash thoroughly after handling.
INHALATION:
Anesthetic. Irritates respiratory tract. Acute overexposure can cause serious nervous system depression. Vapor harmful.
SWALLOWING:
Harmful or fatal if swallowed. Swallowing can cause abdominal irritation, nausea, vomiting & diarrhea.
SUBCHRONIC HAZARDS/CONDITIONS AGGRAVATED
CONDITIONS AGGRAVATED:
Persons with severe skin, liver or kidney problems should avoid use.
CHRONIC HAZARDS
CANCER, REPRODUCTIVE & OTHER CHRONIC HAZARDS:
Leukemia been reported in humans from Benzene. This product contains less than 1 ppm of Benzene. Not considered hazardous in such low concentrations. Absorption thru skin may be harmful.

SECTION 12. ECOLOGICAL INFORMATION

MAMMALIAN INFORMATION:
No mammalian information is available on this product.
AQUATIC ANIMAL INFORMATION:
No aquatic environmental information is available on this product.
MOBILITY:
This material is a mobile liquid.
DEGRADABILITY:
This product is nonbiodegradable.
ACCUMULATION:
This product does not accumulate or bio-magnify in the environment.

SECTION 13. DISPOSAL CONSIDERATIONS

Recycle / dispose of observing national, regional, state, provincial and local health, safety & pollution laws. If questions exist, contact the appropriate agencies.

SECTION 14. TRANSPORT INFORMATION

DOT SHIPPING NAME: BULK: Petroleum Distillates, n.o.s., Combustible liquid, UN1268, PG-III
Combustible liquid. Not DOT regulated on trucks in containers of < 119 gallons.
DRUM LABEL: None (Combustible Liquid)
IATA / ICAO: Petroleum Distillates, n.o.s., 3,UN1268, PG-III
IMO / IMDG: Petroleum Distillates, n.o.s., 3,UN1268, PG-III
EMERGENCY RESPONSE GUIDEBOOK NUMBER: 128
SECTION 15. REGULATORY INFORMATION

EPA REGULATION:
SARA SECTION 311/312 HAZARDS: Acute Health, Fire
All components of this product are on the TSCA list. This material contains no known products restricted under SARA Title III, Section 313 in amounts greater or equal to 1%.

SARA TITLE III INGREDIENTS CAS# WT. % (REG. SECTION) RQ (LBS)
Medium Aliphatic Solvent Naphtha *64742-88-7 <99 (311,312) None

STATE REGULATIONS:
INTERNATIONAL REGULATIONS
The components of this product are listed on the chemical inventories of the following countries: Australia, Canada, Europe (EINECS), Japan, Korea, United Kingdom.

SECTION 16. OTHER INFORMATION

HAZARD RATINGS:
HEALTH (NFPA): 1
HEALTH (HMIS): 1
FLAMMABILITY: 2
REACTIVITY: 0

This information is intended solely for the use of individuals trained in the NFPA & HMIS hazard rating systems.

EMPLOYEE TRAINING
Employees should be made aware of all hazards of this material (as stated in this MSDS) before handling it.

NOTICE
The supplier disclaims all expressed or implied warranties of merchantability or fitness for a specific use, with respect to the product or the information provided herein, except for conformation to contracted specifications. All information appearing herein is based upon data obtained from manufacturers and/or recognized technical sources. While the information is believed to be accurate, we make no representations as to its accuracy or sufficiency. Conditions of use are beyond our control, and therefore users are responsible or verifying the data under their own operating conditions to determine whether the product is suitable for their particular purposes and they assume all risks of their use, handling, and disposal of the product. Users also assume all risks in regards to the publication or use of, or reliance upon, information contained herein. This information relates only to the product designated herein, and does not relate to its use in combination with any other material or process.