

MATERIAL SAFETY DATA SHEET**QUICK IDENTIFIER (In Plant Common Name)**

Rufco PP Series PP20, PP30, PP40

Manufacturer's**Name** RAVEN INDUSTRIES INC.**Address**P.O. Box 5107
Sioux Falls, SD 57117**Emergency**

800-635-3456

Telephone Numbers

605-335-0174

Other**Information** 1812 "E" Avenue
Sioux Falls, SD 57104**Signature of Person****Responsible for Preparation****Date****Prepared**

June 1, 2006

Section 1 - IDENTITY**Common Name: (Used on Label)**

Rufco PP20,PP30,PP40

CAS

n/a

(Trade Name & Synonyms)**Number(s)****Chemical****Name** Polypropylene**Chemical****Family** Polyolefinic Polymer/Stablizers**Formula****Section 2 - HAZARDOUS INGREDIENTS****Principal Hazardous Component(s) - Chemical and Common Na**

%

Threshold Limit Value (units)

None

Section 3 - PHYSICAL & CHEMICAL CHARACTERISTICS (Fire & Explosion Data)**Boiling Point** Not Applicable (N/A) **Specific Gravity** 0.88-1.20 **Vapor Pressure, mmHg** N/A**Percent Volatile by Volume (%)** <0.5% **Vapor Density** N/A **Evaporation Rate** N/A**Solubility in water** Insoluble in water **Reactivity in water** Not reactive in water**Appearance and Odor** Black plastic film
Slight waxy odor**Flash Point** Not Determined **Flammability Limits** **Lower** N/A **Upper** N/A **Auto Ignition Temperature** Not determined**Extinguisher Media** Use water spray, dry chemical, foam or carbon dioxide**Special Fire****Fighting Proced.** Fire fighters should wear a self-contained breathing apparatus when there is a possibility of

exposure to smoke, fumes or hazardous decomposition products. If possible, water should be applied as a spray

from a fogging nozzle since this material is a surface burning material.

Unusual Fire and**Explosion Hazards** Product will melt and or burn when exposed to heat or open flame; avoid contact with molten dripping plastic**Section 4 - PHYSICAL HAZARDS****Stability** **Unstable** **Stable** X **Conditions to Avoid** Keep away from heat, sparks and flame.**Incompatibility (Materials to Avoid)** Consult manufacturer for chemical compatibility before using as a containment or barrier for chemicals other than water. Avoid Oxidizing materials.**Hazardous Decomposition Products** The following combustion products may be generated: Carbon dioxide, carbon monoxide, water vapor, oxides of nitrogen, hydrocarbons, ketones, acrolein, aldehydes, trace volatile organic compounds and unidentified organic compounds**Hazardous Polymerization** **May Occur** **Will not Occur** X **Conditions to Avoid** N/A

Section 5 - HEALTH HAZARDS**Threshold** N/A**Limit Value****Signs and Symptoms of Exposure**

| | | | |
|---------------------|----------------|---------------------|----------------|
| 1. Acute | Not determined | 2. Chronic | Not Determined |
| Overexposure | | Overexposure | |

Medical Conditions Generally There are no known medical conditions aggravated by exposure to this product.**Aggravated by Exposure**

| | | | | | | |
|--|------------------------------------|------------|----------------------------|------------|-------------|------------|
| Chemical Listed as Carcinogen or Potential Carcinogen | National Toxicology Program | Not Listed | L.A.R.C. Monographs | Not Listed | OSHA | Not Listed |
|--|------------------------------------|------------|----------------------------|------------|-------------|------------|

| | | | | | |
|--|------|------------------------------------|------|--------------------------------|------|
| OSHA Permissible Exposure Limit | None | ACGIH Threshold Limit Value | None | Other Expos. Limit Used | None |
|--|------|------------------------------------|------|--------------------------------|------|

Emergency and First Aid Procedures Most problems will result from exposure to molten materials.**1. Inhalation** Immediately remove victim from area to fresh air. Seek medical attention.**2. Eyes** If contacted by molten material, immediately flush eyes with plenty of cool water for at least 15 minutes. Do not permit victim to rub eyes. Immediately seek medical attention.**3. Skin** If contact by molten material, cool immediately with cool water. Do not attempt to remove any solidified material. Immediately seek medical attention.**4. Ingestion** If material is ingested, contact a physician or Poison Control Center as appropriate whenever any foreign object is swallowed.**Section 6 - SPECIAL PROTECTION INFORMATION****Respiratory Protection****(Specify Type)** Not required under normal handling and ventilation conditions

| | | | | |
|--------------------|----------------------|-----------------------------|----------------|--------------|
| Ventilation | Local Exhaust | Mechanical (General) | Special | Other |
| N/A | N/A | N/A | N/A | N/A |

| | | | |
|--------------------------|---|-----------------------|--|
| Protective Gloves | Wear protective gloves during thermal processing. | Eye Protection | Wear eye protection during thermal processing. |
|--------------------------|---|-----------------------|--|

Other Protective Clothing or Equipment Wear protective sleeves when processing material at elevated temperatures to minimize the possibility of thermal burns.**Section 7 - SPECIAL PRECAUTIONS AND SPILL / LEAK PROCEDURES****Precautions to be Taken****in Handling and Storage** This product should be stored in a manner that they are not exposed to heat and sources of ignition. A static charge may be present on finished products.**Other Precautions** None**Steps to be Taken in Case****Material is Released or Spilled** Spilled material should be swept up and discarded. Comply with applicable state, federal and local regulations.**Waste Disposal****Methods** Dispose in accordance with local, state and federal regulations**IMPORTANT - Do not leave blank spaces. If information is unavailable, unknown or does not apply, so indicate**