SAFETY DATA SHEET

1. Product and Company Identification

Product Name: Enviro Blanket Restorer
Product Code: ES263B **Chemical Type: Solvent Blend**
Product Use: GM8020 is a high flash point solvent system.

Manufacturer: Rapid Blanket Restorer Corp.
Address: PO Box 674.
Chesterland, Ohio 44026-0674

Revision Date: 12/19/2014
Emergency: Chemtrec (800)424-9300
Phone: (330) 821-6326

2. Hazards Identification

2.1 Classification of the substance or mixture
GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)
Flammable liquids (Category 4), H227
Skin irritation (Category 2), H315
Eye irritation (Category 2A), H319
Reproductive toxicity (Category 1B), H360
Specific target organ toxicity - single exposure (Category 3), Respiratory system, H335

2.2 GHS Label elements, including precautionary statements

Pictogram

Signal word Danger

Hazard statement(s)
H227 Combustible liquid
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H335 May cause respiratory irritation.
H360 May damage fertility or the unborn child.

Precautionary statement(s)
P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.
P264 Wash skin thoroughly after handling.
P271 Use only outdoors or in a well-ventilated area.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
P302 + P352 IF ON SKIN: Wash with plenty of soap and water.
P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308 + P313 IF exposed or concerned: Get medical advice/ attention.
P321 Specific treatment (see supplemental first aid instructions on this label).

P332 + P313 If skin irritation occurs: Get medical advice/ attention.
P337 + P313 If eye irritation persists: Get medical advice/ attention.
P362 Take off contaminated clothing and wash before reuse.
P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.
P403 + P233 Store in a well-ventilated place. Keep container tightly closed.
P403 + P235 Store in a well-ventilated place. Keep cool.
P501 Dispose of contents/ container to an approved waste disposal plant.

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS

Emergency Overview
WARNING! COMBUSTIBLE LIQUID AND VAPOR. CAUSES EYE IRRITATION. MAY CAUSE SKIN AND RESPIRATORY TRACT IRRITATION. PROLONGED OR REPEATED CONTACT MAY DRY SKIN AND CAUSE DERMATITIS AND BURNS.

Potential Health Effects
Exposure routes: Inhalation, Skin absorption, Skin contact, Eye Contact, Ingestion

Eye contact: Can cause severe eye irritation. Symptoms include stinging, tearing, redness, and swelling of eyes. Can injure eye tissue.

Skin contact: Can cause skin irritation. Symptoms may include redness and burning of skin, and other skin damage. Prolonged or repeated contact may dry the skin. Symptoms may include redness, burning, and drying and cracking of skin, skin burns, and other skin damage. Additional symptoms of skin contact may include: skin blistering

Ingestion: Swallowing small amounts of this material during normal handling is not likely to cause harmful effects. Swallowing large amounts may be harmful.

Inhalation: It is possible to breathe this material under certain conditions of handling and use (for example, during heating, spraying, or stirring). Breathing small amounts of this material during normal handling is not likely to cause harmful effects. Breathing large amounts may be harmful. Symptoms are not expected at air concentrations below the recommended exposure limits, if applicable.

Aggravated Medical Condition: Preexisting disorders of the following organs (or organ systems) may be aggravated by exposure to this material:, Skin, lung (for example, asthma-like conditions), blood-forming system

Symptoms: Signs and symptoms of exposure to this material through breathing, swallowing, and/or passage of the material through the skin may include:, stomach or intestinal upset (nausea, vomiting, diarrhea), irritation (nose, throat, airways), central nervous system depression (dizziness, drowsiness, weakness, fatigue, nausea, headache, unconsciousness), confusion

Target Organs: Overexposure to this material (or its components) has been suggested as a cause of the following effects in laboratory animals:, damage to the blood-forming system, male and female reproductive fertility effects

Carcinogenicity: Methylpyrrolidone (NMP) caused an increased number of liver tumors in mice, but not rats, that had ingested high doses over a lifetime. The relevance of this finding to humans is uncertain. NMP is not listed as carcinogenic by the International Agency for Research on Cancer (IARC), the National Toxicology Program (NTP), or the Occupational Safety and Health Administration (OSHA).

Reproductive hazard: This material (or a component) has been shown to cause birth defects in laboratory animal studies. Harm to the fetus occurs only at exposure levels that harm the pregnant animal. The relevance of these findings to humans is uncertain.

3. Composition / Information on Ingredients

Components	CAS No.	Concentration range	Units (wt./wt.)
N-Methyl Pyrrolidone	872-50-4	90-100	%
Hydroxypropyl Cellulose	Proprietary	<1	%

4. First Aid Measures

Eyes: If symptoms develop, immediately move individual away from exposure and into fresh air. Flush eyes gently with water for at least 15 minutes while holding eyelids apart; seek immediate medical attention.

Skin: Remove contaminated clothing. Flush exposed area with large amounts of water. If skin is damaged, seek immediate medical attention. If skin is not damaged and symptoms persist, seek medical attention. Launder clothing before reuse.

Ingestion: Seek medical attention. If individual is drowsy or unconscious, do not give anything by mouth; place individual on the left side with the head down. Contact a physician, medical facility, or poison control center for advice about whether to induce vomiting. If possible, do not leave individual unattended.

Inhalation: If symptoms develop, move individual away from exposure and into fresh air. If symptoms persist, seek medical attention. If breathing is difficult, administer oxygen. Keep person warm and quiet; seek immediate medical attention.

5. Fire Fighting Measures

Suitable extinguishing media: Dry chemical, Carbon dioxide (CO2), Water spray

Hazardous combustion products: carbon dioxide and carbon monoxide, Hydrocarbons, nitrogen compounds

Precautions for fire-fighting: If product is heated above its flash point it will produce vapors sufficient to support combustion. Vapors are heavier than air and may travel along the ground and be ignited by heat, pilot lights, other flames and ignition sources at locations near the point of release. Never use welding or cutting torch on or near drum (even empty) because product (even just residue) can ignite explosively.Wear full firefighting turn-out gear (full Bunker gear), and respiratory protection (SCBA). Use water spray to cool fire exposed containers and structures until fire is out if it can be done with minimal risk. Avoid spreading burning material with water used for cooling purposes.

NFPA Flammable and Combustible Liquids Classification: Combustible Liquid Class IIIA

6. Accidental Release Measures

Personal precautions: For personal protection see section 8. Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed. Ensure adequate ventilation. Eliminate all ignition sources (flares, flames including pilot lights, electrical sparks). Pay attention to the spreading of gases especially at ground level (heavier than air) and to the direction of the wind.

Environmental precautions: Prevent spreading over a wide area (e.g. by containment or oil barriers). Do not let product enter drains. Do not flush into surface water or sanitary sewer system. Local authorities should be advised if significant spillages cannot be contained.

Methods for cleaning up: Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).

Other information: Comply with all applicable federal, state, and local regulations. Suppress (knock down) gases/vapours/mists with a water spray jet.

7. Handling and Storage

Handling: FOR INDUSTRIAL USE ONLY. KEEP OUT OF REACH OF CHILDREN

Handling: Containers of this material may be hazardous when emptied. Since emptied containers retain product residues (vapor, liquid, and/or solid), all hazard precautions given in the data sheet must be observed. Static ignition hazard can result from handling and use. Electrically bond and ground all containers, personnel and equipment before transfer or use of material. Special precautions may be necessary to dissipate static electricity for non-conductive containers. Use proper bonding and grounding during product transfer as described in National Fire Protection Association document NFPA 77.

Storage: Store in a cool, dry, ventilated area.

8. Exposure Controls / Personal Protection

Exposure Guidelines **872-50-4**
METHYL-N 2-PYRROLIDONE

WEEL	time weighted average	10 ppm
WEEL	time weighted average	40 mg/m3

General advice: These recommendations provide general guidance for handling this product. Personal protective equipment should be selected for individual applications and should consider factors which affect exposure potential, such as handling practices, chemical concentrations and ventilation. It is ultimately the responsibility of the employer to follow regulatory guidelines established by local authorities.

Exposure controls: Provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below exposure guidelines (if applicable) or below levels that cause known, suspected or apparent adverse effects.

Eye protection: Wear chemical splash goggles when there is the potential for exposure of the eyes to liquid, vapor or mist. Maintain eye wash station near work area.

Skin and body protection: Wear normal work clothing including long pants, long-sleeved shirts and foot covering to prevent direct contact of the product with the skin. Launder clothing before reuse. If skin irritation develops, contact your facility health and safety professional or your local safety equipment supplier to determine the proper personal protective equipment for your use.
Wear resistant gloves (consult your safety equipment supplier).
Discard gloves that show tears, pinholes, or signs of wear.

Respiratory protection: A NIOSH-approved air-purifying respirator with an appropriate cartridge and/or filter may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits (if applicable) or if overexposure has otherwise been determined. Protection provided by air-purifying respirators is limited. Use a positive pressure, air-supplied respirator if there is any potential for uncontrolled release, exposure levels are not known or any other circumstances where an air-purifying respirator may not provide adequate protection.

Discretion Advised: Chemical Solvents Inc. takes no responsibility for determining what measures are required for personal protection in any specific application. The general information should be used with discretion.

9. Physical and Chemical Properties

Physical state: liquid **Color: clear**
Odor: mild, amine-like **Boiling point/boiling range: 399 °F / 204 °C**
Melting point/range: -11.6 °F / -24.2 °C **pH: 7.2 @ 10 %**
Flash point: 196 °F / 91 °C **Vapor pressure: 0.320 hPa @ 68 °F / 20 °C**
Density: 1.027 g/cm3 @ 77 °F / 25 °C **log Pow: -0.46**
Auto-ignition temperature: 473 °F / 245 °C
Viscosity, dynamic: 1.661 mPa.s @ 25 °C

10. Stability and Reactivity

Stability: Stable.
Conditions to avoid: Heat, flames and sparks. Exposure to moisture., Exposure to light.
Incompatible products: Reducing agents, Strong acids, strong alkalis, Strong oxidizing agents
Hazardous decomposition products: carbon dioxide and carbon monoxide, Hydrocarbons, nitrogen compounds
Hazardous reactions: Product will not undergo hazardous polymerization.

11. Toxicological Information

		N-Methyl Pyrrolidone
Information on likely routes of exposure	:	Inhalation Skin absorption Skin contact Eye Contact Ingestion

Acute oral toxicity: LD 50 Rat: 4,150 mg/kg
Acute inhalation toxicity: LC 50 Rat: > 5.1 mg/l Exposure time: 4 h
Acute dermal toxicity: LD 50 Rabbit: 8,000 mg/kg
Respiratory or skin sensitisation: Classification: Did not cause sensitisation on laboratory animals.

Germ cell mutagenicity
Genotoxicity in vitro: In vitro tests did not show mutagenic effects
Genotoxicity in vivo: Type: in vivo assay Result: negative

12. Ecological Information

METHYL-N 2-PYRROLIDONE:
Toxicity to fish: LC 50 (Lepomis macrochirus (Bluegill sunfish)): 832 mg/l Exposure time: 96 h
Toxicity to daphnia and other aquatic invertebrates: EC 50 (Water flea (Daphnia magna)): > 1,000 mg/l Exposure time: 24 h
Toxicity to algae: EC 50 (Desmodesmus subspicatus): > 500 mg/l Exposure time: 72 h
Biodegradability : Biodegradation: 73 % Exposure time: 28 d Method: OECD Test Guideline 301C

13. Disposal Considerations

US EPA RCRA Status: This material when discarded is not a hazardous waste as that term is defined by the Resource, Conservation and Recovery Act (RCRA), 40 CFR 261.

Disposal considerations: Incineration Recycle

Miscellaneous advice: Local, state, provincial, and national disposal regulations may be more or less stringent. Consult your attorney or appropriate regulatory officials for information on such disposal. This product should not be dumped, spilled, rinsed or washed into sewers or public waterways.

14. Transport Information

The data provided in this section is for information only. Please apply the appropriate regulations to properly classify your shipment for transportation.

US DOT: Combustible Liquids, N.O.S., NA 1993, PG III

15. Regulatory Information

UNITED STATES:
Toxic Substances Control Act (TSCA): The components of this product are listed on the TSCA Inventory of Existing Chemical Substances.

California Prop. 65
WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm. METHYL-N 2-PYRROLIDONE

SARA Hazard Classification
SARA 311/312 Classification: Fire Hazard, Acute Health Hazard, Chronic Health Hazard

SARA 313 Component(s) METHYL-N 2-PYRROLIDONE >99 %

16. Other Information

Hazard ratings This information is intended solely for the use of individuals trained in the NFPA and/or HMIS systems.

NFPA: Health:2 Flammability: 2 Reactivity: 0
HMIS: Health:2* Flammability: 2 Reactivity: 0
RATING: 4-EXTREME 3-HIGH 2-MODERATE 1-SLIGHT 0-INSIGNIFICANT

Note:
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