SAFETY DATA SHEET

Version 1.0
Revision Date 05/21/2015

SECTION I. IDENTIFICATION

Product identifiers

Product name : Renovo AR

Brand : EMS

Relevant indentified uses of the substance or mixture and uses advised against

Identified uses : Non Petroleum Based Asphalt Release Agent

Details of the supplier of the safety data sheet

Company : Environmental Manufacturing Solutions, LTD
7705 Progress Circle
Melbourne, FL 32904
USA

For product information only

Telephone : +1 877-424-6979
Fax : +1 800-510-3861

Emergency telephone number

Emergency Phone # : **Chemtrec**
: +1 800-424-9300 (Within USA)
: (703) 527-3887 (Outside USA)

SECTION II. HAZARD IDENTIFICATION

GHS Classification of the substance or mixture

Acute Toxicity-Oral: Category 5
Skin Corrosion/Irritation: Category 3
Serious Eye Damage/Eye Irritation: Category 2B

GHS Label Elements

Signal Word: **Warning**
Symbols: **Not Applicable**

Hazard Statements: **May be harmful if swallowed**
Causes mild skin irritation
Causes eye irritation

Hazards not otherwise classified (HNOC) or not covered by GHS-Not Applicable

Other Information: May cause mild skin irritation if not rinsed off with soap and water
May cause eye irritation if not rinsed out with copious amounts of water

SECTION III. COMPOSITION/INFORMATION ON INGREDIENTS

Substances

No ingredients are hazardous according to OSHA criteria.
No components need to be disclosed according to the applicable regulations.

NOTE:

The identity of this material is a trade secret (29 CFR 1910.1200(i)) and is available to any attending physician, paramedical personnel and/or spill response personnel in the case of an emergency.

There are no additional ingredients present which, within the current knowledge of the manufacturer and in the concentrations applicable, classified as hazardous to the health or environment thus do not require reporting in this section.

SECTION IV. FIRST AID MEASURES

Description of first aid measures

General advice
It is always recommended to consult a physician. Show this safety data sheet to the doctor in attendance.

If Inhaled
If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact
Remove any contaminated clothing first. Wash off with soap and plenty of water. If irritation occurs consult a physician.

In case of eye contact
If wearing contacts, first remove. Flush eyes with water as a precaution. If irritation occurs consult a physician.

If swallowed
Never give anything by mouth to an unconscious person. Rinse mouth with water. If irritation occurs consult a physician.

Most important symptoms and effects, both acute and delayed
The most important known symptoms and effects are described in the labeling (see section 2) and/or section 11

Indication of any immediate medical attention and special treatment needed
No data available

SECTION V. FIREFIGHTING MEASURES

Extinguishing media

Suitable extinguishing media
Product does not support combustion, use extinguishing agent for type of surrounding fire.

Special hazards arising from the substance or mixture
No data available

Advice for firefighters
Wear self contained breathing apparatus for firefighting if necessary

Further information
No data available

SECTION VI. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures
Use personal protective equipment. Avoid breathing any vapors or mist. Ensure adequate ventilation.
Move personnel to safe areas.
For personal protection see section 8

Methods and materials for containment
Soak up with inert absorbent material and dispose of in accordance with local and state disposal regulations.
Keep in suitable closed containers for proper disposal.

Reference to other sections
For disposal see section 13

SECTION VII. HANDLING AND STORAGE

Precautions for safe handling
Avoid contact with skin and eyes. Avoid inhalation of vapor or mist.
For precautions see section 2

Conditions for safe storage, including any incompatibilities
Keep container tightly closed in a dry and well ventilated place. Open containers must be carefully closed/resealed and kept upright to prevent leakage. Do not mix with strong oxidizing agents

SECTION VIII. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Components with workplace control parameters
Contains no substances with occupational exposure limit values.

Exposure controls

Appropriate engineering equipment
Handle in accordance with good industrial hygiene and safety practices. Personal protective equipment may be worn for added safety in accordance with the below recommended equipment. Wash hands before all breaks and at the end of the workday.

Personal protective equipment

Eye/face protection
While eye protection is not required, where protection from nuisance levels are desired, use equipment for eye protection tested and approved under appropriate government standards such as
NIOSH (US) or EN 166(EU).

Skin protection
While skin protection is not required, where protection from nuisance levels are desired, Gloves must be inspected prior to use. Use proper glove removal technique. Dispose of contaminated gloves after
use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Full contact
Material: Nitrile rubber

Splash contact
Material: Nitrile rubber

If mixed with other substances, and under conditions which differ from product directions, contact your glove supplier. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

Body Protection
While body protection is not required, where protection from nuisance levels are desired, choose body protection in relation to its type, to the concentration and to the specific work-place.

Respiratory protection
While Respiratory protection is not required, where protection from nuisance levels are desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure
Do not let product enter storm drains.

SECTION IX. PHYSICAL AND CHEMICAL PROPERTIES

a)	Appearance	Form: Liquid
b)	Odor	Mild
c)	Odor Threshold	No data available
d)	pH	No data available
e)	Freeze/melting point	≤ -26F
f)	Boiling point	No data available
g)	Flash point	No data available
h)	Evaporation rate	No data available
i)	Flammability (solid, gas)	No data available
j)	Upper flammability limits	No data available
k)	Lower flammability limits	No data available
l)	Vapor pressure	No data available
m)	Vapor density	No data available
n)	Specific gravity	0.895 ± 0.02
o)	Water Solubility	Slightly Soluble
p)	Partition coefficient	No data available
q)	Auto-ignition temperature	No data available
r)	Decomposition temperature	No data available
s)	Kinematic viscosity	No data available
t)	Explosive properties	No data available
u)	Oxidizing properties	No data available

Other safety information
No data available
These physical properties are typical values for this product and not specifications. No other data available.

SECTION X. STABILITY AND REACTIVITY

Reactivity
This material is considered to be non-reactive under normal conditions of use.

Chemical stability
Stable under recommended storage conditions

Possibility of hazardous reactions
No data available

Conditions to avoid
No data available

Incompatible materials
Strong oxidizing agents

Hazardous decomposition products
Other decomposition products -no data available
In the event of fire, see section 5

SECTION XI. TOXICOLOGICAL INFORMATION

Information on toxicological effects

Acute toxicity
LD50 Oral - rat - 3,365 mg/kg

Respiration: no data available

Inhalation: no data available

Dermal: no data available

Skin corrosion/irritation:
no data available

Serious eye damage/eye irritation:
no data available

Respiratory or skin sensitisation
no data available

Germ cell mutagenicity
no data available

Carcinogenicity
IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive toxicity
no data available

Specific target organ toxicity - single exposure
no data available

Specific target organ toxicity - repeated exposure
no data available

Aspiration hazard
no data available

Additional Information
To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly Investigated by any agency, governmental or otherwise.

SECTION XII. ECOLOGICAL INFORMATION

Toxicity
no data available

Persistence and degradability
no data available

Bioaccumulative potential
Does not bioaccumlate

Mobility in soil
no data available

Results of PBT and vPvB assessment
PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

Other adverse effects
no data available

SECTION XIII. DISPOSAL CONSIDERATIONS

Waste treatment methods

Product
Offer surplus and non-recyclable solutions to a licensed disposal company.

Contaminated packaging
Dispose of as unused product.

Note: Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

SECTION XIV. TRANSPORT INFORMATION

TRANSPORT INFORMATION

DOT (US)
Not dangerous goods

IMDG
Not dangerous goods

IATA
Not dangerous goods

Note: The proper shipping name and/or hazard class for this product may vary according to packaging, properties and mode of transportation. Customer is urged to consult 49 CFR 100-177, IMDG, IATA, EC, United Nations TDG and WHMIS (Canada) TDG information manuals for detailed regulations and exceptions covering specific container sizes, packaging materials and methods.

SECTION XV. REGULATORY INFORMATION

US FEDERAL

Health & Safety Reporting List

None of the chemicals are on the Health & Safety Reporting List.

Chemical Test Rules

None of the chemicals in this product are under a Chemical Test Rule.

TSCA Section 12b

None of the chemicals are listed under TSCA Section 12b.

TSCA Significant New Use Rule

None of the chemicals in this material have a SNUR under TSCA.

CERCLA Hazardous Substances and corresponding RQs

None of the chemicals in this material have an RQ.

SARA Section 302 Components

None of the chemicals in this product have a TPQ. No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

Section 313 Components

SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SARA 311/312 Hazards

No SARA Hazards

Clean Air Act:

This material does not contain any hazardous air pollutants.
This material does not contain any Class 1 Ozone depletors.
This material does not contain any Class 2 Ozone depletors.

Clean Water Act:

None of the chemicals in this product are listed as Hazardous Substances under the CWA.
None of the chemicals in this product are listed as Priority Pollutants under the CWA.
None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

OSHA:

None of the chemicals in this product are considered highly hazardous by OSHA.

STATE

This chemical is not present on state lists from CA, PA, MN, MA, FL, or NJ.

California Prop 65 Components

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other *rep*roductive harm..

European/International Regulations

European Labeling in Accordance with EC Directives

European Economic Community

Classification per Directive 67/548/EEC or 1999/45/EC
Not Classified

Risk Phrases: None allocated

Safety Phrases: S2-Keep out of reach of children
S24/25 Avoid contact with skin and eyes

WGK, Germany (Water danger/protection): No data available

Canada - DSL/NDSL

This product is listed on Canada's DSL List.

Canada - WHMIS

WHMIS: Not available.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the SDS contains all of the information required by those regulations. Canadian Ingredient Disclosure List: N/A

SECTION XVI. OTHER INFORMATION

OTHER INFORMATION

HMIS Rating

Health hazard:	0
Flammability:	0
Physical Hazard:	0

NFPA Rating

Health hazard:	0
Fire Hazard:	0
Reactivity Hazard:	0

Further information

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End of Safety Data Sheet