SECTION 1. Identification

1.1 Product Identifier:
Product Name: RA-227 Release Agent
Product Code: Formulation JB-136

1.2 Uses of the product:
Release Agent for Concrete

1.3 Details of the product manufacturer:
Supplied By: Specco Industries Inc.
601 N. 5th Ave.
Kankakee, Illinois 60901
(630)-257-5060
e-Mail: Info@specco.com

1.4 Emergency Telephone Number:
24 Hour Emergency:
INFOTRAC: 1-800-535-5053

Outside U.S. and Canada
Infotrac: 352-323-3500

Note: INFOTRAC and National Response Center emergency numbers to be used only in the event of chemical emergencies involving a spill, leak, fire, exposure or accident involving chemicals

SECTION 2. Hazard(s) Identification

2.1*** EMERGENCY OVERVIEW**(OSHA HAZARDS)
* Combustible liquid and vapor, May be harmful if swallowed and enters airways. May cause respiratory irritation. May cause skin and eye irritation

2.2 GHS –US Classification of the substance or mixture:
Acute toxicity, Oral- Cat. 5
Acute toxicity, inhalation- Cat 5
Aspiration Hazard- Cat 2
Flammable Liquids- Cat. 4
Specific target organ toxicity-single exposure-Cat. 3, Respiratory System

2.3 Label elements:

Symbol(s) of Product GHS-US labeling:
Hazard pictograms (GHS-US):
Signal Word: WARNING

2.3 Label Elements:

GHS –US HAZARD STATEMENTS:
H227 Combustible Liquid
H305 May be harmful if swallowed and enters airways
H333 May be Harmful if inhaled
H335 May cause respiratory irritation.
GHS –US PRECAUTIONARY STATEMENTS

Prevention:
P202 Do not handle until all safety precautions have been read and understood.
P210 Keep away from heat, hot surfaces, sparks, open flames, and other ignition sources.
P261 Avoid breathing fume/gas/mist/vapors/spray.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P264 Wash thoroughly after handling.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P271 Use only outdoors or in well-ventilated areas.
P270 Do not eat, drink or smoke when using this product.
P280 Wear protective gloves/protective clothing/eye protection/face protection.

Response:
P301+P310+P331 IF SWALLOWED, immediately call a POISON CENTER/doctor/physician. Do NOT induce vomiting.
P304 + P340+P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor/physician if you feel unwell.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.
P314 Get medical attention/advice if you feel unwell.
P331 Do NOT induce vomiting
P322 + P313 If skin irritation occurs: get medical advice/attention.
P337 + P313 If eye irritation occurs: get medical advice/attention.
P362 + P364 Take off contaminated clothing and wash it before reuse.
P370 + P378 In case of fire: Use appropriate method to extinguish.

Storage:
P403 + P233 Store in a well-ventilated place. Keep containers tightly closed.

Disposal:
P501 Dispose of contents/container in accordance with local / regional / national / international regulations.

2.4 Other hazards:
Hazardous decomposition products: None listed

SECTION 3. Composition on Ingredients

3.1 Substances:

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS-No.</th>
<th>Wt %</th>
<th>GHS-US Symbols</th>
<th>GHS-US Statements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aliphatic Hydrocarbon</td>
<td>64742-48-9</td>
<td>40</td>
<td>GHS02-GHS07</td>
<td>H226-315-335-336, 351-373</td>
</tr>
<tr>
<td>Hydrocarbon Oil Mixture</td>
<td>8042-47-5</td>
<td>10</td>
<td>GHS07-GHS07</td>
<td>H-225315-319-332-335-351</td>
</tr>
<tr>
<td>Hydro treated Light Napthenic</td>
<td>64742-53-6</td>
<td>30</td>
<td>GHS07-GHS07</td>
<td>H-225315-319-332-335-351</td>
</tr>
<tr>
<td>Proprietary</td>
<td>Trade Secret</td>
<td>20</td>
<td>N.A.</td>
<td>N.A.</td>
</tr>
</tbody>
</table>

Note: The full text for GHS Statements shown above (if any) is given in the “Other Information” Sect.

(16) STOT SE = Specific target organ toxicity for a single exposure
  STOT RE = Specific target organ toxicity for a repeated exposure
SECTION 4. First-Aid Measures

4.1 Description of first aid measures:

**FIRST AID- EYE CONTACT:** Immediately flush eyes with water. Flush eyes with water for a minimum of 15 minutes, occasionally lifting and lowering upper lids. Get medical attention promptly. Remove contact lenses if worn.

**FIRST AID- SKIN CONTACT:** Immediately flush skin with plenty of water. Remove clothing. Get medical attention immediately. Wash clothing separately and clean shoes before reuse.

**FIRST AID- INHALATION:** Rescuers should put on appropriate protective gear. Remove from area of exposure. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Keep victim warm. Get immediate medical attention.

**FIRST AID- INGESTION:** If swallowed, do NOT induce vomiting. Give victim a glass of water. Call a physician or poison control center immediately. Never give anything by mouth to an unconscious person.

4.2 Principle symptoms and health effects both acute and delayed:

**EYE CONTACT:** May cause eye irritation.

**SKIN CONTACT:** Contact with skin may cause mild irritation. Prolonged or repeated contact can result in defatting skin which may result in skin irritation and dermatitis (rash). Personnel with pre-existing skin disorders should avoid contact with this product.

**INHALATION:** Vapors can cause irritation of the respiratory tract. High concentrations can cause headache, nausea, weakness, light headedness, and stupor (CNS depression).

**INGESTION:** If swallowed, immediately call a Poison Control Center/doctor. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with Water.

**CHRONIC SYMPTOMS:** Possible brain damage from overexposure. Overexposure may cause nervous system damage. Chronic effects of ingestion and subsequent aspiration into the lungs may cause pneumatocele (lung cavity) formation and chronic lung dysfunction. Significant exposure to this chemical may adversely affect people with chronic disease of the respiratory system, central nervous system, kidney, liver, skin, and/or eyes.

**Primary Route(s) of Entry:** Eye Contact, Ingestion, Inhalation, Skin Contact

4.3 Indication of any immediate medical attention and special treatment needed:

No specific actions are required.

SECTION 5. Fire-Fighting Measures

5.1 Extinguishing Media:

**Suitable Extinguishing Media:** Carbon Dioxide, Dry Chemical, Foam, Water Fog

**Unsuitable Extinguishing Media:** None Known

5.2 Special hazards arising from the substance or mixture:
**Fire Hazard:** Combustible liquid and vapor. Can form explosive mixtures at temperatures at or above the flashpoint. Vapors/dust may form explosive mixture with air. Vapors can travel to a source of ignition and flash back. Empty containers retain product residue (liquid and/or vapor) and can be dangerous. DO NOT pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, static electricity, or other sources of ignition. Also, do not reuse container without commercial cleaning or reconditioning.

**Explosion Hazard:** Yes—see above.

**Reactivity:** No hazardous combustion products or hazard reactions are known.

5.3 Advice for Firefighters: As in any fire, wear self-contained breathing apparatus pressure-demand (MSHA / NIOSH approved or equivalent) and full protective gear. Evacuate all unnecessary personnel. Shut down motors, pumps, electrical service, and eliminate sources of ignition. Avoid use of solid water streams. Water spray to cool containers or protect personnel. Use with caution. Water runoff can cause environmental damage. Dike and collect water used to fight fire.

### SECTION 6. Accidental Release Measures

6.1 Personal precautions, protective equipment, and emergency procedures

**General:** Wear personal protection equipment (see Section 8). Keep unprotected persons away. Avoid contact with eyes and skin. Avoid inhaling mists and vapors. If material is released indicate risk of slipping.

**Protective Equipment:** Wear protective clothing as appropriate for the work environment, including gloves, and eye/face protection. Use respiratory protection as recommended in Section 8—Exposure controls/personal protection.

**Emergency Procedure:** Collect spilled materials for disposal.

6.2 Environmental precautions:

**Containment:** Prevent material from entering surface waters, drains or sewers and soil. Contain any fluid that runs out using suitable material. Retain contaminated water/extinguishing water. Dispose of in prescribed marked containers. Spills of materials which could reach surface waters must be reported to the United States Coast Guard National Response Center’s toll free phone number (800) 424-8802.

6.3 Methods and material for containment and cleaning up:

Do not flush away with water. For small amounts: Absorb with a liquid binding material such as diatomaceous earth, dry sand, or earth, place in a chemical waste container, and dispose of according to local/state/federal regulations. Do not touch or walk though spilled material. Avoid runoff into storm sewers and ditches which lead to waterways. Ventilate spilled area. Stay upwind of spill. A vapor suppressing foam may be used to reduce vapors. Use only non-combustible material for clean-up. Use clean, non-sparking tools to collect absorbed materials. Contain larger amounts and pump up into suitable containers. Clean any slippery coating that remains using a detergent/soap solution or another biodegradable cleaner. Exhaust vapors.

6.4 Reference to other Sections:

Refer to Sections 8 and 13 for additional information. Eliminate all sources of ignition.

### SECTION 7. Handling and Storage
7.1 Precautions for safe handling:

**Work Practices**: Use only in well ventilated places. Avoid breathing vapor, fumes or mist. Avoid contact with eyes, skin, and clothing. When transferring, follow proper grounding procedures. Use spark resistant tools. Do not load into compartments adjacent to heated cargo. Use explosion proof equipment. Always open containers slowly to allow any excess pressure to vent. Follow all SDS/label precautions even after the containers are emptied because they may retain product residues.

**Hygiene Practices**: Do not eat, drink, or smoke in work areas. Wash hands after use. Remove contaminated clothing and protective equipment before entering eating areas.

7.2 Conditions for safe storage, including any incompatibilities:
Keep away from heat, sparks, and flame. Containers can build up pressure if exposed to heat (fire). Store containers in a cool, well ventilated place. Keep container closed when not in use. Protect from direct sunlight. Keep away from heat (<95 deg F, <35 deg C) and direct sunlight.

**Static Discharge**: Materials can accumulate static charges which can cause an incendiary electrical discharge. Material is a static accumulator which has the potential of forming ignitable vapor-air mixtures in storage tanks.

7.3 Specific end use(s):
**Intended Use(s)**: Concrete Release Agent for forms and molds
**Prohibited use(s)**: None listed

---

**SECTION 8. Exposure Controls/Personal Protection**

8.1 Control Parameters:
**Ingredients with Occupational Exposure Limit**:

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH-TLV-TWA</th>
<th>ACGIH-TLV STEL</th>
<th>OSHA PEL-TWA</th>
<th>OSHA PEL-CEILING</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aliphatic solvent</td>
<td>100 ppm</td>
<td>ND</td>
<td>500 ppm</td>
<td>N.D.</td>
</tr>
<tr>
<td>Petroleum hydrocarbon</td>
<td>5 mg/m3</td>
<td>10 mg/m3</td>
<td>5 mg/m3</td>
<td>N.D.</td>
</tr>
</tbody>
</table>

8.2 Exposure controls:
8.2.1 **Engineering controls**:
Minimize the release of solvent fumes or vapors. Use process controls, local exhaust ventilation, or other engineering controls to maintain airborne levels below the limits shown in Section 8.1 above. See also ACGIH Industrial Ventilation-Recommended Practice (latest edition).

8.2.2 **Personal protective equipment (PPE)**:

**RESPIRATORY PROTECTION**: NIOSH/MHSA approved respirators are necessary if airborne concentrations are expected to exceed exposure limits. Local and general ventilation controls are recommended.
SKIN PROTECTION: Wear impervious, impermeable gloves such as butyl rubber based to prevent contact with the skin. Wear protective gear as needed such as an apron, long sleeved shirts to minimize contact. Wash hands with soap and water after use.

EYE PROTECTION: Wear safety glasses with side shields (or goggles) and a face shield

OTHER PROTECTIVE EQUIPMENT: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

HYGENIC PRACTICES: Do not eat or drink in areas where the material is used. Avoid breathing vapors. Remove contaminated clothing and wash before re-use. Wash thoroughly after handling. Wash hands before eating.

SECTION 9. Physical and Chemical Properties

9.1 Information on basic physical and chemical properties:

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Pale yellow/amber liquid</td>
</tr>
<tr>
<td>Odor</td>
<td>Hydrocarbon odor</td>
</tr>
<tr>
<td>Density, g/cm³</td>
<td>0.846</td>
</tr>
<tr>
<td>Freeze Point, °F</td>
<td>N.A.</td>
</tr>
<tr>
<td>Solubility in Water</td>
<td>Negligible, less than 1%</td>
</tr>
<tr>
<td>Boiling Range, °F</td>
<td>N.A.</td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>N.A.</td>
</tr>
<tr>
<td>Vapor Density</td>
<td>Heavier than air</td>
</tr>
<tr>
<td>Physical State</td>
<td>Liquid</td>
</tr>
<tr>
<td>VOC Content, g/L / lb/gal</td>
<td>245 / 2.04</td>
</tr>
<tr>
<td>pH</td>
<td>N.A.</td>
</tr>
<tr>
<td>Viscosity</td>
<td>N.D.</td>
</tr>
<tr>
<td>Explosive Limits, vol%</td>
<td>N.A.</td>
</tr>
<tr>
<td>Flash Point, °F</td>
<td>Approx.200F (mixture)</td>
</tr>
<tr>
<td>Auto Ignition Temp, °F</td>
<td>N.A.</td>
</tr>
<tr>
<td>Weight/gallon</td>
<td>7.05 lb/gal</td>
</tr>
</tbody>
</table>

9.2 Note: See “Other Information” Section (16) for abbreviation legend

SECTION 10. Stability and Reactivity

10.1 Reactivity:
No information available

10.2 Chemical stability:
Stable under normal temperature and pressure

10.3 Possibility of hazardous reactions:
Hazardous reactions or polymerization will not occur.

10.4 Conditions to avoid:
Avoid impact, friction, heat, sparks, flame and sources of ignition.

10.5 Incompatible materials:
Keep away from alkalies. Prevent contact with halogens. Prevent contact with strong oxidizing agents. Keep away from acids.

10.6 Hazardous decomposition products:
No information
SECTION 11. Toxilogical Information

11.1 Information on Toxilogical Effects: Toxilogical testing has not been conducted with this material.

11.1.1 Acute toxicity: The acute effects of this product have not been tested. Data on individual components are tabulated below:

<table>
<thead>
<tr>
<th>CAS#</th>
<th>Name according to EEC</th>
<th>Oral LD50, mg/kg</th>
<th>Dermal LD50, mg/kg</th>
<th>Vapor LC50, mg/L</th>
</tr>
</thead>
<tbody>
<tr>
<td>64742-47-8</td>
<td>Aliphatic Hydrocarbon</td>
<td>&gt;5000</td>
<td>&gt;2000</td>
<td>&gt;20</td>
</tr>
</tbody>
</table>

Symptoms of exposure: May be harmful if swallowed and enters airways. May be Harmful if inhaled. May cause respiratory irritation. May cause Skin and Eye Irritation.

11.1.2 Skin corrosion/irritation:
11.1.3 Serious eye damage/eye irritation
11.1.4 Respiratory or skin sensitization
11.1.5 Germ cell mutagenicity:
11.1.6 Carcinogenicy:
11.1.7 Reproductive toxicity:
11.1.8 Specific target organ toxicity (single exposure)
11.1.9 Specific target organ toxicity (repeated exposure)
11.1.10 Aspiration hazard

Assessment: For this endpoint, no toxilogical test data is available for the whole product.

11.1.11: If Material is misted/sprayed, inhalation of mist may cause irritation of mucous membranes and the upper respiratory tract. Aspiration may lead to lid pneumonia.

SECTION 12. Ecological Information

12.1 Toxicity
Ecotoxicity: No known significant effects or critical hazards.

12.2 Persistence and degradability
Solvent portion is expected to be readily biodegradable

12.3 Bioaccumulative potential
Not known to bio-accumulate.

12.4 Mobility in Soil
The material has a low solubility in water. The solvent portion has a high volatility (tendency to move from water to air), and will partition rapidly to the air. Therefore, chronic aquatic toxicity is not expected.

12.5 Other adverse effects
No other specific adverse effects known.

SECTION 13. Disposal Considerations
13.1 RCRA Waste Classification
D0001 Ignitable. This classification applies only to the material as it was originally produced.

13.2 Product disposal
Recommended to dispose of according to regulations in a special waste incinerator. Always dispose of any waste in accordance with all local, state, and federal regulations.

13.3 Packaging disposal
Completely discharge containers (no tear drops, no residual contents). Containers may be recycled or be reused. Observe local/state/federal regulations.

SECTION 14. Transport Information

14.1 UN Number:
NA 1993

14.2 UN Proper Shipping Name:
Petroleum Distillates, N.O.S. (naphtha solvent), Combustible Liquid,

14.3 Transport hazards class:
3
Note: Combustible Liquid-Not regulated in containers less than 119 gallons. For Combustible Liquid exemption, refer to CFR 49,173.150 paragraph H.

14.4 Packing Group:
III

14.5 Environmental hazards:
Not relevant

14.6 Special precautions for user:
No special precautions

SECTION 15. Regulatory Information

15.1 U.S. Federal Regulations:

TSCA No:
This material or its components are listed on or are in compliance with the requirements of the TSCA Chemical Substance Inventory. This material does not contain any TSCA 12(b) regulated chemicals.

SARA SECTION
302: None Known
311/312 (Hazard Class)Acute health hazard, Fire hazard, Delayed (chronic) health hazard

SARA SECTION 313 (Chemicals)
This product contains no chemicals subject to the reporting requirements of Section 313 of Title III of the Superfund Amendment and reauthorization Act of 1986 and 40CFR part 372:

RCRA:
No components are listed under the Resource Conservation and Recovery Act, or its regulations., 40CFR S261 et. Seq.

CERCLA:
Components of this product have been reviewed according to the EPA “Hazard Categories” promulgated under Sections 311 and 312 of the Superfund Amendment and reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories: Fire Hazard, Acute Health Hazard, Chronic Health Hazard

**EMERGENCY PLANNING AND COMMUNITY RIGHT TO KNOW ACT:**
None listed

**CLEAN AIR ACT:**
This product does not contain any Class I or Class II ozone depleting substances.

**FDA:**
No information

**NTP:**
No information

**OSHA:**
No information

**15.2 U.S, State Regulations:**

**CALIFORNIA PROPOSITION 65:**
This material does not contain any chemicals known to the state of California to cause cancer.

**CALIFORNIA PROPOSITION 65 REPRODUCTIVE TOXINS**
No Proposition 65 Reproductive Toxins exist in this product

**MASSACHUSETTS TOXIC USE REDUCTION ACT:**
This material contains no listed components

**NEW JERSEY RIGHT-TO-KNOW:**
This material contains no listed components

**PENNSYLVANIA RIGHT-TO-KNOW:**
This material contains no listed components

**15.3 International regulations:**

**CANADIAN WHMIS:**
This product has been classified in accordance with the Hazard criteria of the CPR and the SDS contains all of the information required by the CPR

**WHMIS Class:** B3

**DSL Status:** This material or one or more of its components is not listed on the Canadian Domestic Substances List.

**EUROPEAN UNION:**
No Information

**IARC:**
No information

**15.4 Other Regulations**
National, state, provincial or local emergency planning, community right to know or other laws, regulations or ordinances may be applicable-consult applicable national, state, provincial or local laws.
SECTION 16. Other Information

Revision Date: 02-14-15  Supersedes Date: New SDS

S.D.S. produced by: Specco Regulatory Department in accordance with the requirements outlined in the Federal Register, Volume 77, NO.58, March 2012 page 17574. In this final rule, OSHA modified its Hazard Communication Standard (HCS) to conform to the United Nation’s Globally Harmonized System of Classification and Labeling of Chemicals (GHS). The modifications to the standard included but were not limited to revised criteria for classification of chemical hazards and a new specified format for Safety Data Sheets.

Standardized American System for the identification of hazards presented by this product in view of emergency procedures (NFPA 704) -H.M.I.S. Ratings:

<table>
<thead>
<tr>
<th>Health:</th>
<th>Flammability:</th>
<th>Reactivity:</th>
<th>Personal Protection:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>0</td>
<td>G</td>
</tr>
</tbody>
</table>

* Refer to Section 2 and Section 11 of this SDS

Regarding Volatile Organic Compounds, gram/liter: N.A. (0)

DISCLAIMER: THE VOLATILE ORGANIC COMPOUND (V.O.C.) CONTENT REPORTED HEREIN, IF ANY, IS BASED ON A MATERIAL V.O.C. CALCULATION. NOTE THAT SEVERAL METHODS ARE USED FOR CALCULATING V.O.C. CONTENT AND THAT STANDARDS/REQUIREMENTS REGARDING V.O.C. CONTENT VARY BY LOCATION/JURISDICTION. ACCORDINGLY, SPECCO MAKES NO REPRESENTATIONS OR WARRANTIES, EXPRESSED OR IMPLIED, REGARDING THIS MATERIAL’S COMPLIANCE WITH V.O.C. STANDARDS/REQUIREMENTS APPLICABLE IN LOCATIONS/JURISDICTIONS WHERE THIS MATERIAL MAY BE SOLD OR USED.

Icons for GHS Pictograms shown in Section 3 describing each ingredient:

GHS07

GHS08


The information on this SDS was obtained from sources which we believe to be reliable. However, the information provided is without any warranty, expressed or implied, regarding its correctness. Some information presented and conclusions drawn herein are from sources other than direct test data on the product itself. The information and recommendations are offered for the user’s consideration and examination and should be used to make an independent determination of the methods to safeguard workers and the environment. The conditions or methods of handling, storage, use and disposal of the product are beyond our control and may be beyond our knowledge. For these reasons we do not assume responsibility and expressly disclaim any liability from loss, damage, or expense arising out of or in any way connected with handling, storage, use, or disposal of this product. It is the responsibility of the user to comply with all Federal, State, and Local laws and regulations.