

Safety Data Sheet



Revision Date: 2016-08-17

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

RB Solv A100 ND

Product Name	RB Solv A100 ND
Product Use	Industrial Solvent
Supplier	RB Products, Inc. 740 Bradfield Road Houston, TX 77060 USA Tel: 1 (281) 992-3500
24 Hour Emergency Number	1 (800) 424-9300 (CHEMTREC, USA)
Other Product Information	sales@rbproductsinc.com

SECTION 2: HAZARDS IDENTIFICATION

CLASSIFICATION:

Flammable Liquid, Category 3; H226	Flammable Liquid and Vapor.
Skin Corrosion/Irritation, Category 2; H315	Causes Skin Irritation.
Serious Eye Damage/Irritation, Category 2A; H319	Causes serious eye irritation.
Acute Toxicity Inhalation, Category 4; H322	Harmful if inhaled.
Chronic Aquatic Toxicity; Category 2; H411	Toxic to aquatic life with long lasting effects.
Specific Target Organ Toxicity, Category 3; H335	May cause respiratory irritation.

Signal Word: WARNING!

PICTOGRAM:



EMERGENCY OVERVIEW

This product is a clear, colorless (or slightly colored) liquid with an aromatic-like odor. Repeated exposure may cause skin dryness or cracking or minor irritation. The product is flammable. Depending on the duration of over-exposure, breathing vapors may cause drowsiness, headache or dizziness, respiratory tract irritation or central nervous system depression. Thermal decomposition of this product may produce irritating vapors and toxic gases (e.g. carbon monoxide and carbon-dioxide). Emergency responders must wear personal protective equipment (and have appropriate fire-extinguishing protection) suitable for the situation to which they are responding.

HAZARD STATEMENTS

H226 Flammable liquid and vapor, H302 Harmful if swallowed, H315 Causes skin irritation, H319 Causes serious eye irritation, H335 May cause respiratory irritation, H412 Harmful to aquatic life with long lasting effects.

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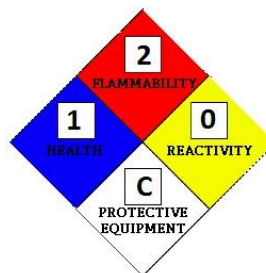
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PRECAUTIONARY STATEMENTS

- P280 Wear protective gloves/protective clothing/eye protection/face protection.
 P301+P312+P330 IF SWALLOWED Call POISON CENTER or doctor/physician if you feel unwell. Rinse mouth.
 IF ON SKIN (or hair): Remove/take off immediately all contaminated clothing. Rinse skin with water/shower.
 P302+P352+P353 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.
 P304+P340 Call a POISON CENTER or doctor/physician if you feel unwell.
 P305+P351+P338 If skin irritation occurs: Get medical advice/attention.
 If eye irritation persists: Get medical advice/attention.
 P312 Take off contaminated clothing and wash before reuse.
 P332+P313 In case of fire: Use water fog, carbon dioxide, dry sand, dry chemical or alcohol-resistant foam for extinction
 P337+P313
 P362 Store in a well-ventilated place. Keep container tightly closed.
 P370+P378 Store locked up.
 Dispose of contents/container in accordance with all federal, state and local regulation.

Hazardous Materials Information System (USA) National Fire Protection Association (USA)

Health	1
Flammability	2
Physical Hazard	0
Protective Equipment	C



Unclassified Hazards: None.

Ingredients with unknown acute toxicity: None.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name; CAS#, EINECS#	% w/w	US OSHA	GHS/EU CLP	WHMIS
Solvent naphtha (petroleum), light aromatic (CAS 64742-95-6, EINECS 265-199-0)	100%	Flammable Liquid (Category 3) Acute toxicity, inhalation (Category 4) Skin irritation (Category 2) Eye irritation (Category 2A) Specific target organ toxicity – single exposure Respiratory system (Category 3)	Flammable Liquid (Category 3) Acute toxicity, inhalation (Category 4) Skin irritation (Category 2) Eye irritation (Category 2A) Specific target organ toxicity – single exposure (Category 3) Specific target organ toxicity, single exposure, Respiratory System (Category 3) Acute aquatic Toxicity (Category 2) Chronic Aquatic Toxicity (Category 2)	B3, Flammable Liquid

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1,2,4-trimethylbenzene (CAS 95-63-6, EINECS 202-436-6)	35% max	Flammable Liquid (Category 3) Acute toxicity, inhalation (Category 4) Skin irritation (Category 2) Eye irritation (Category 2A) Specific target organ toxicity – single exposure Respiratory system (Category 3)	Flammable Liquid (Category 3) Acute toxicity, inhalation (Category 4) Skin irritation (Category 2) Eye irritation (Category 2A) Specific target organ toxicity – single exposure (Category 3) Specific target organ toxicity, single exposure, Respiratory System (Category 3) Acute aquatic Toxicity (Category 2) Chronic Aquatic Toxicity (Category 2)	B3, Flammable Liquid
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NE = Not Established; C = Ceiling Limit. See Section 16 for definitions of terms used.

SECTION 4: FIRST AID MEASURES

- Inhalation** Remove victim to fresh air and place in a position comfortable for breathing. If necessary, use artificial respiration to support vital functions. Remove or cover gross contamination to avoid exposure to rescuers.
- Eyes** Open victim's eye while under gently running water. Use sufficient force to open eyelids. Have victim "roll" eyes. Minimum flushing is for 15 minutes. Seek medical attention if eye irritation persists.
- Skin** Immediately begin decontamination with running water. Remove exposed or contaminated clothing, taking care not to contaminate eyes. Victim should seek immediate medical attention if any adverse exposure symptoms develop or irritation persists.
- Ingestion** If this product is swallowed, CALL POISON CENTER or PHYSICIAN FOR MOST CURRENT INFORMATION. DO NOT INDUCE VOMITING. Have victim rinse mouth with water, if conscious. Never induce vomiting or give a diluent (e.g., water) to someone who is unconscious, having convulsions, or unable to swallow. If contaminated individual is convulsing, maintain an open airway and obtain immediate medical attention.

SECTION 5: FIRE-FIGHTING MEASURES

FLAMMABLE PROPERTIES

Flammable Liquid, Category 3

Flash Point: 42°C (108°F)

Autoignition Temperature: 479°C (894°F)

Flammable Limits (in air by volume, %): Upper: 6.2%, Lower: 0.9% (approximate).

Suitable and unsuitable extinguishing media

This material will contribute to the intensity of the fire. Use extinguishing material suitable for organic liquids.

Water spray: YES; Foam: YES; Halon: YES; Carbon dioxide: YES; Dry chemical: YES.

Specific Hazards Arising From Chemical

When involved in a fire, this material may decompose and produce irritating fumes and toxic gases (e.g. carbon monoxide, carbon dioxide).

Explosion Sensitivity to Mechanical Impact: None.

Explosion Sensitivity to Static Discharge: Vapors may ignite.

Special Protective Equipment and Precautions For Fire-Fighters

Incipient fire responders should wear eye protection. Structural firefighters must wear Self-Contained Breathing Apparatus and full protective equipment. Move containers from fire area if it can be done without risk to personnel. If possible, prevent runoff water from entering storm drains, bodies of water, or other environmentally sensitive areas.

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SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions

Uncontrolled releases should be responded to only by trained personnel using pre-planned procedures. Proper protective equipment should be used. In case of a spill, clear the affected area and protect people.

Protective equipment

For small releases (< 20 liters/5 gallons), clean up spilled liquid wearing gloves, goggles, faceshield, and suitable body protection. Absorb with earth, sand or other non-combustible material and transfer to containers for proper disposal. The minimum Personal Protective Equipment recommended for response to non-incident releases (more than 20 liters/5gallons) should be Level C: triple-gloves (neoprene gloves over nitrile gloves), chemical resistant suit and boots, hard hat, and full-face respirator with Organic Vapor cartridge. Monitoring must indicate oxygen levels above 19.5% in order to use air purifying respirators. Prevent further leak/release if it is safe to do so. Do not let the product enter drains.

Emergency procedures

Eliminate all ignition sources. Stop leak if you can do so without risk. Monitoring must indicate that exposure levels are below those provided in Section 8 (Exposure Controls-Personal Protection) and that oxygen levels are above 19.5% before anyone is permitted in the area without Self-Contained Breathing Apparatus.

Methods and Materials for Containment and Cleaning Up

Use absorbent material for cleaning up spills. Collect spilled material for proper disposal. Decontaminate the area thoroughly. Place all spill residues in a suitable container. Dispose of in accordance with applicable U.S. Federal, State, or local procedures, or appropriate local standards (see Section 13, Disposal Considerations).

SECTION 7: HANDLING AND STORAGE

Precautions for Safe Handling

All employees who handle this material should be trained to handle it safely. Open containers carefully on a stable surface. Ensure all connections are tight before transfer. Empty containers may contain residual liquid; therefore, empty containers should be handled with care. Keep away from ignition sources; no smoking.

As with all chemicals, avoid getting this product ON YOU or IN YOU. Wash thoroughly after handling this product. Do not eat or drink while handling this material. Remove contaminated clothing promptly.

During equipment maintenance follow practices indicated in Section 6 (Accidental Release Measures) to decontaminate equipment or clean-up small spills. Make certain that application equipment is locked and tagged-out safely if necessary. Collect all rinsates and residual material and dispose of according to applicable U.S. Federal, State, or local procedures or appropriate local standards.

Conditions For Safe Storage

Keep containers tightly closed. Protect against static discharge. Store individual containers out of direct sunlight. Tanks should be stored away from intense heat or direct sunlight. Storage temperature should not exceed 105°F (40.5°C). Avoid freezing. Store away from incompatible materials. Material should be stored in secondary containers, or in a diked area, as appropriate. Storage and use areas should be covered with impervious materials. Keep container tightly closed when not in use. If appropriate, post warning signs in storage and use areas. Inspect all incoming containers before storage, to ensure containers are properly labeled and not damaged.

Incompatibilities

Oxidizers, strong oxidizing acids.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters:

Chemical Name	CAS#	% w/w	Exposure limits in air						
			ACGIH-TLV		OSHA-PEL (NIOSH)		OTHER		
			TWA	STEL	TWA	STEL	IDLH		
			ppm	ppm	ppm	ppm	ppm	ppm	

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Solvent naphtha (petroleum), light aromatic	64742-95-6	100%	NE	NE	NE	NE	NE		
1, 2, 4 - trimethylbenzene	95-63-6	35% Max.	25	NE	(25)	NE	NE		

None of the other components contribute significant additional hazards at the concentration present in this product. All pertinent hazard information has been provided in this document, per the requirements of the Federal Occupation Safety and Health Administration Standard (29 CFR 1910.1200), U.S. State equivalent Standards and Canadian Workplace Hazardous Materials Identification System Standards (CPR 4).

Appropriate Engineering Controls

Use with adequate ventilation to ensure exposure levels are maintained below the limits provided in this Section or as low as reasonably achievable. Ensure eyewash/safety shower stations are available near areas where this product is used.

PERSONAL PROTECTIVE EQUIPMENT

Respiratory protection

None needed under normal conditions of use. Use NIOSH approved respirators if ventilation is inadequate to control mists or vapor. If respiratory protection is needed, use only protection authorized in the U.S. Federal OSHA Standard (29 CFR 1910.134), applicable U.S. State regulations, or the applicable local standards. Oxygen levels below 19.5% are considered IDLH by OSHA. In such atmospheres, use of a full-face piece pressure/demand SCBA or a full-face piece, supplied air respirator with auxiliary self-contained air supply is required under OSHA's Respiratory Protection Standard (1910.134-1998).

Eye protection

Use approved safety goggles or safety glasses, as described in OSHA 29 CFR 1910.133. Splash goggles with a face shield may be needed if splash hazards exist.

Hand protection

Wear chemical impervious gloves (e.g., Solvex™, Neoprene, Nitrile).

Body protection

None normally needed. If needed, use body protection appropriate for task (e.g., Tyvek suit, rubber apron) to protect from splashes and sprays.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Clear, Colorless
Odor	Aromatic
Odor threshold	NE
pH	NE
Melting point	-14°C (7°F) approx.
Initial boiling point and boiling range	160°C - 180°C (320°F - 357°F)
Flash Point	> 38°C (> 100°F)
Evaporation Rate (water = 1)	NE
Vapor Density (air = 1)	4.2
Vapor pressure at 20°C	1.97 mmHg (2.63 hPa)
Solubility (in water)	Insoluble
Relative density (water = 1)	0.87
Viscosity	0.9 cSt at 25°C
Oil-Water Partition Coefficient	0.2% - 0.6%
Decomposition Temperature	NE
How to detect this substance	Use a photoionization detector to determine real-time

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SECTION 10: STABILITY AND REACTIVITY

Reactivity: Not considered reactive.

Chemical stability: Stable under normal use and storage.

Possibility of hazardous reactions: Hazardous polymerization will not occur.

Conditions to avoid: Avoid heat, sparks, open flames and other ignition sources. Avoid mixing with incompatible materials.

Incompatible materials: Strong oxidizers, oxidizing acids.

Hazardous decomposition products: Thermal decomposition of this product may generate carbon monoxide and carbon dioxide.

SECTION 11: TOXICOLOGICAL INFORMATION

Component	Oral LD ₅₀ (mg/kg)	Dermal LD ₅₀ (mg/kg)	Inhalation LC ₅₀ (ppm)	Skin Irritation	Serious eye damage
Solvent naphtha (Petroleum), Light aromatic (CAS 64742-95-6)	NE	NE	6000-10000 mg/m ³ (Rat)	Minimal (Mice)	Minimal Irritation (Mice)
1, 2, 4 - trimethylbenzene (CAS 95-63-6)	5000 mg/kg (Rat)	> 4000 mg/kg (Rat)	18000-24000 (Rat)	Minimal (Rabbit)	Minimal Irritation (Rabbit)

Carcinogenicity (IARC, ACGIH, NTP, OSHA)

None of the components are listed in IARC, ACGIH, NTP or OSHA carcinogens.

SECTION 12: ECOLOGICAL INFORMATION

All work practices must be aimed at eliminating environmental contamination.

ECOLOGICAL INFORMATION

Component	Toxicity to fish	Toxicity to daphnia	Bioaccumulation	Solubility	Biodegradability
Solvent naphtha (Petroleum), Light aromatic (CAS 64742-95-6)	3.5 - 9.2 mg/L (LC50, no species identified)	No data available	Not expected to bioaccumulate	Insoluble	Readily biodegradable
1, 2, 4 - trimethylbenzene (CAS 95-63-6)	7.72 mg/L (LC50, 96-hr, Fathead Minnow)	3.6 mg/L (EC50)	Not expected to bioaccumulate	Insoluble	Readily biodegradable

Persistence and degradability: The components of this product are not expected to be persistent in the environment and are expected to decompose.

Bioaccumulative potential: The components of this product are not expected to bioaccumulate.

Mobility in soil: When spilled onto soil, this product is expected to evaporate slowly.

Results of PBT and vPvB assessment: This product contains no PBT/vPvB chemicals.

Other adverse effects: This product may be harmful to aquatic life if large volumes of it are released into an aquatic environment.

SECTION 13: DISPOSAL CONSIDERATIONS

Preparing Wastes of this Product for Disposal

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Waste disposal must be in accordance with appropriate U.S. Federal, State, and local regulations or with local regulations.

Disposal of Contaminated Packaging

Cleaned containers can be recycled or disposed of as non-contaminated waste, if authorized by your local authorities.

Dispose of containers as required by local regulations.

U.S. EPA Waste Number D001

SECTION 14: TRANSPORT INFORMATION

This material is hazardous as defined by 49 CFR 172.101 by the U.S. Department of Transportation. Always consult latest regulations prior to shipping for changes!

UN Number	UN1268
UN Proper Shipping Name	Petroleum distillates, N.O.S.
Transport Hazard Class	3
Transport labels required	3 (Flammable Liquids)
Packing Group	III
Marine Pollutant	No
NA Emergency Response Guide Number (2012)	128

INTERNATIONAL AIR TRANSPORT ASSOCIATION

UN Number	UN1268
UN Proper Shipping Name	Petroleum Distillates, N.O.S.
Transport Hazard Class	3
Transport labels required	3 (Flammable Liquid)
Packing Group	III
Packaging Instructions	Y344

INTERNATIONAL MARITIME ORGANIZATION

UN Number	UN1268
UN Proper Shipping Name	Petroleum Distillates, N.O.S.
Transport Hazard Class	3
Transport labels required	3 (Flammable Liquid)
Packing Group	III
Marine Pollutant	No
NA Emergency Response Guide Number (2012)	128

SECTION 15: REGULATORY INFORMATION

Program	Solvent Naphtha	1, 2, 4 - trimethylbenzene
Clean Air Act Hazardous Air Pollutants	No.	No.
Safe Drinking Water Act	No.	No.
RCRA F, K, P, U or D lists	No.	No.
SARA 302 EHS RQ	No.	No.
Sara 302 EHS TPQ	No.	No.
CERCLA RQ (lbs)	No.	No.
SARA 313 Listed	No.	Yes.
SARA 311/312 Chronic	Yes.	No.
SARA311/312 Fire	Yes.	Yes.
SARA 311/312 Pressure	No.	No.
SARA 311/312 Reactivity	No.	No.
EPA Extremely Hazardous Substance	No.	No.
PEL	No.	No.

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PSM	No.	No.
DHS CFATS STQ (Flammable Release)	10000	10000
DEA Controlled Substances	No.	No.
WHMIS	B3	B3
DSL	Yes.	Yes.
NDSL	Yes.	Yes.
REACH Pre-registered list	Yes.	Yes.
TSCA (Public)	Yes.	Yes.
CA Prop 65	No.	No.
European Inventory of Existing Commercial Chemical Substances (EINECS)	Listed.	Listed.
EU No-Longer Polymers List (NLP)	No.	No.
EEC Classification Packaging and Labeling of Dangerous Substances (Annex 1)	NE	NE
Phillipines	NE	NE
Japan	NE	NE
Australia	NE	NE
Korea	NE	NE
China	NE	NE
New Zealand Inventory of Chemicals	NE	NE

SECTION 16: OTHER INFORMATION

DEFINITION OF TERMS

Section 2	GHS: Global Harmonization System; OSHA: U.S. Occupational Safety and Health Administration; CLP: Classification and Packaging; WHMIS: Workplace Hazardous Materials Information System; STOT: Specific Target Organ Toxicity
Section 3	CAS #: Chemical Abstract Service index number; EINECS #: European Chemical Substances Information System index number
Section 5	NFPA: Nation Fire Protection Association; Health Hazard: 0 (material that on exposure under fire conditions would offer no hazard beyond that of ordinary combustible materials); 1 (materials that on exposure under fire conditions could cause irritation or minor residual injury); 2 (materials that on intense or continued exposure under fire conditions could cause temporary incapacitation or possible residual injury); 3 (materials that can on short exposure could cause serious temporary or residual injury); 4 (materials that under very short exposure could cause death or major residual injury). Flammability Hazard Reactivity Hazard: Refer to definitions for “Hazardous Materials Identification System”. Flash Point: Minimum temperature at which a liquid gives off sufficient vapors to form an ignitable mixture with air. Autoignition Temperature: The minimum temperature required to initiate combustion in air with no other source of ignition. LEL: The lowest percent of vapor in air, by volume, that will explode or ignite in the presence of an ignition source. UEL: The highest percent of vapor in air, by volume, that will explode or ignite in the presence of an ignition source.
Section 8	ACGIH - American Conference of Governmental Industrial Hygienists, a professional association which establishes exposure limits. TLV - Threshold Limit Value - an airborne concentration of a substance which represents conditions under which it is generally believed that nearly all workers may be repeatedly exposed without adverse effect. The duration must be considered, including the 8-hour Time Weighted Average (TWA), the 15-minute Short Term Exposure Limit, and the instantaneous Ceiling Level (C). Skin absorption effects must also be considered PEL - Permissible Exposure Limit - This exposure value means exactly the same as a TLV, except that it is enforceable by OSHA. The OSHA Permissible Exposure Limits are based in the 1989 PELs and the June, 1993 Air Contaminants Rule (Federal Register: 58: 35338-35351 and 58: 40191). Both the current PELs

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	<p>and the vacated PELs are indicated. The phrase, "Vacated 1989 PEL," is placed next to the PEL which was vacated by Court Order.</p> <p>IDLH - Immediately Dangerous to Life and Health - This level represents a concentration from which one can escape within 30-minutes without suffering escape-preventing or permanent injury. The DFG - MAK is the Republic of Germany's Maximum Exposure Level, similar to the U.S. PEL. NIOSH is the National Institute of Occupational Safety and Health, which is the research arm of the U.S. Occupational Safety and Health Administration (OSHA). NIOSH issues exposure guidelines called Recommended Exposure Levels (RELs). When no exposure guidelines are established, an entry of NE (Not Established) is made for reference</p>
Section 11	<p>LD50 : Lethal Dose (solids & liquids) which kills 50% of the exposed animals; LC50 : Lethal Concentration (gases) which kills 50% of the exposed animals; ppm: Concentration expressed in parts of material per million parts of air or water; mg/m3 : Concentration expressed in weight of substance per volume of air; mg/kg: Quantity of material, by weight, administered to a test subject, based on their body weight in kg; IARC - the International Agency for Research on Cancer; NTP - the National Toxicology Program, RTECS - the Registry of Toxic Effects of Chemical Substances, OSHA and CAL/OSHA. IARC and NTP rate chemicals on a scale of decreasing potential to cause human cancer with rankings from 1 to 4. Subrankings (2A, 2B, etc.) are also used. TDLo, the lowest dose to cause a symptom and TCLo the lowest concentration to cause a symptom; TDo, LDLo, and LDo, or TC, TCo, LCLo, and LCo, the lowest dose (or concentration) to cause lethal or toxic effects. BEI - Biological Exposure Indices, represent the levels of determinants which are most likely to be observed in specimens collected from a healthy worker who has been exposed to chemicals to the same extent as a worker with inhalation exposure to the TLV.</p>
Section 12	<p>LC50: The lowest concentration in water which kills 50% of the test subjects. EC50: The Effect Concentration in water at which 50% of the test species if affected.</p>
Section 13	<p>DOT: US Department of Transportation; IATA: International Air Transport Association; IMO: International Maritime Organization; MARPOL: International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978; IBC Code : Merchant Shipping Code</p>
Section 15	<p>RCRA: US Resource Conservation and Recovery Act; SARA: US Superfund Amendments and Reauthorization Act; PSM: US OSHA Process Safety Management; CFATS: US Department of Homeland Security Chemical Facility Anti-terrorism Standard; DSL: Canadian Domestic Substances List; NDSL: Canadian Non-Domestic Substances List; REACH: European Registration, Evaluation, Authorization and Restriction of Chemicals list; TSCA: US Toxic Substances Control Act</p>

Notice: This Safety Data Sheet is based upon data considered to be accurate at the time of its preparation. Despite our efforts, it may not be up to date or applicable to the circumstances of any particular case. We are not responsible for any damage or injury resulting from abnormal use, from any failure to follow appropriate practices or from hazards inherent in the nature of the product. This Safety Data Sheet conforms to the requirements of ANS1 Z400 1.