

Safety Data Sheet



Revision Date: 2016-08-17

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

RB Solv HAD 104

Product Name	RB Solv HAD 104
Product Use	Industrial Applications
Supplier	RB Products, Inc. 740 Bradfield Road Houston, TX 77060 USA Tel: 1 (281) 992-3500
Emergency Health Information	1 (800) 447-8735
Emergency Spill Information	1 (800) 424-9300 CHEMTEC (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.

PICTOGRAM:



HAZARD STATEMENTS:

DANGER!

Flammable liquid. Causes skin and eye irritation. May cause respiratory irritation. May be harmful if swallowed and enters airways. Toxic if inhaled. Suspected of causing cancer. Suspected of damaging the unborn child. Toxic to aquatic life with long lasting effects.

PREVENTION:

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from heat/sparks/open flames/hot surfaces. No smoking. Avoid breathing dust/fume/gas/mist/vapors/spray. Use only outdoors or in a well-ventilated area. Avoid release to the environment. Wear protective gloves, eye and face protection. Use personal protective equipment as required.

REPOSE:

IF SWALLOWED: Immediately call a POISON CENTER or a doctor/physician.
IF INHALED: Call a POISON CENTER or doctor/physician if you feel unwell.
IF EXPOSED or concerned: Get medical advice/attention.

Safety Data Sheet



Revision Date: 2016-08-17

Do NOT induce vomiting. Remove victim to fresh air and keep at rest in a position comfortable for breathing. Collect spillage.

STORAGE:

Store in a well ventilated place. Keep cool. Store locked up.

DISPOSAL:

Dispose of contents/container in accordance with local/national regulations.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

This product contains the following substances that present a hazard within the meaning of the relevant State and Federal Hazardous Substances regulations.

Ingredient/Chemical Designations	Weight %	GHS Classification	Notes
Solvent naphtha (petroleum), heavy aromatic CAS Number: 0064742-94-5	100	Asp. Tox. 1;H304 Aquatic Acute 2;H401 Aquatic Chronic 2;H411	[1]
Naphthalene CAS Number: 0000091-20-3	0.10 - 7.5	Carc. 2;H351 Acute Tox. 4;H302 Aquatic Acute 1;H400 Aquatic Chronic 1;H410	[1][2]
Toluene CAS Number: 0000108-88-3	0.10 - 1.0	Flam. Liq. 2;H225 Repr. 2;H361d Asp. Tox. 1;H304 STOT RE 2;H373 Skin Irrit. 2;H315 STOT SE 3;H336	[1][2]

In accordance with paragraph (i) of §1910.1200, the specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.

[1] Substance classified with a health or environmental hazard.

[2] Substance with a workplace exposure limit.

[3] PBT-substance or vPvB-substance.

*The full texts of the phrases are shown in Section 16.

SECTION 4: FIRST AID MEASURES

General	In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person.
Inhalation	Remove to fresh air, keep patient warm and at rest. If breathing is irregular or stopped, give artificial respiration. If unconscious place in the recovery position and obtain immediate medical attention. Give nothing by mouth.
Eyes	Irrigate copiously with clean water for at least 15 minutes, holding the eyelids apart and seek medical attention.
Skin	Remove contaminated clothing. Wash skin thoroughly with soap and water or use a recognized skin cleanser.
Ingestion	If swallowed, do NOT induce vomiting. Never give anything by mouth to an unconscious person. Aspiration hazard if swallowed can enter lungs and cause damage. Get medical attention immediately.
Overview	Eyes: Causes eye irritation. Skin: Causes skin irritation. Possible cancer hazard based on skin-painting studies in laboratory animals involving continuous, long-term contact. Inhalation: No significant health hazards identified.

Safety Data Sheet



Revision Date: 2016-08-17

Ingestion: Aspiration hazard if swallowed—harmful or fatal if liquid is aspirated into lungs. Possible cancer hazard. Contains an ingredient which may cause cancer based on animal data (See Section 3 and Section 15 for each ingredient). Risk of cancer depends on duration and level of exposure. Exposure to solvent vapor concentrations from the component solvents in excess of the stated occupational exposure limits may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Symptoms include headache, nausea, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness.

Inhalation Toxic if inhaled. May be fatal if swallowed and enters airways.

Ingestion May be harmful if swallowed. (Not adopted by US OSHA)

SECTION 5: FIRE-FIGHTING MEASURES

Extinguishing media:

SMALL FIRE: Use DRY chemical powder

LARGE FIRE: Use water spray, fog or foam. Do not use water jet.

Special hazards arising from the substance or mixture:

Hazardous decomposition: Products of Combustion: Carbon oxides (CO, CO₂) and other hazardous substances. Keep away from heat/sparks/open flames/hot surfaces - No smoking. Avoid breathing dust/fume/gas/mist/vapors/spray.

Advice for fire-fighters:

DO NOT FIGHT FIRE WHEN IT REACHES MATERIAL. Withdraw from fire and let it burn. Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire.

Unusual fire/explosion Hazards: Combustible liquid and vapor. Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back.

Protective Clothing (Fire): Firefighters should wear full bunker gear, including a positive pressure self contained breathing apparatus.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:

Put on appropriate personal protective equipment (see section 8).

Environmental precautions:

Do not allow spills to enter drains or waterways.

Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

Methods and material for containment and cleaning up:

Immediately contact emergency personnel. Eliminate all ignition sources. Keep unnecessary personnel away. Use suitable protective equipment (Section 8). Follow all fire fighting procedures (Section 5).

If emergency personnel are unavailable, contain spilled material. For small spills add absorbent (soil may be used in the absence of other suitable materials) and use a non-sparking or explosion proof means to transfer material to be sealed, appropriate container for disposal. For large spills dike spilled material or otherwise contain material to ensure runoff does not reach a waterway. Place spilled material in an appropriate container for disposal. Minimize contact of spilled material with soils to prevent runoff to surface waterways. See Section 13 for Waste Disposal Information.

Personal Protection in Case of a Large Spill: Splash goggles. Full suit. Vapor respirator. Boots. Gloves. A self-contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

Safety Data Sheet



Revision Date: 2016-08-17

SECTION 7: HANDLING AND STORAGE

Precautions for safe handling:

Aspiration hazard if swallowed – harmful or fatal if liquid is aspirated into lungs. If ingested do not induce vomiting. Avoid contact with eyes, skin and clothing. Avoid breathing vapors or spray mists. Keep container closed. Use only with adequate ventilation. Keep away from heat, sparks and flame. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. Use explosion-proof electrical (ventilation, lighting and material handling) equipment. Wash thoroughly after handling.

See section 2 for further details. - [Prevention]:

Conditions for safe storage, including any incompatibilities:

Handle containers carefully to prevent damage and spillage.

Store in a cool dry area, away from heat, sparks and open flame. Keep containers sealed when not in use. Store out of direct sunlight.

Incompatible materials: Strong oxidizing agents and acids.

Store in a segregated and approved area. Keep container tightly closed. Keep container in a cool, well-ventilated area. Avoid all possible sources of ignition (spark or flame)

See section 2 for further details. - [Storage]:

Specific end use(s):

No data available.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters:

EXPOSURE

CAS No.	Ingredient	Source	Value
0000091-20-3	Naphthalene	OSHA	TWA 10 ppm (50 mg/m ³) STEL 15 ppm
		ACGIH	TWA: 10 ppm STEL: 15 ppm Skin 2B
		NIOSH	TWA 10 ppm (50 mg/m ³) ST 15 ppm (75 mg/m ³)
		Supplier	No Established Limit
0000108-88-3	Toluene	OSHA	TWA 200 ppm C 300 ppm 500 ppm (10-minute maximum peak) STEL 150 ppm
		ACGIH	TWA: 20 ppmR
		NIOSH	TWA 100 ppm (375 mg/m ³) ST 150 ppm (560 mg/m ³)
		Supplier	No Established Limit
0064742-94-5	Solvent naphtha (petroleum), heavy aromatic	OSHA	No Established Limit
		ACGIH	No Established Limit
		NIOSH	No Established Limit
		Supplier	No Established Limit

CARCINOGEN DATA

CAS No.	Ingredient	Source	Value
0000091-20-3	Naphthalene	OSHA	Select Carcinogen: No
		NTP	Known: No; Suspected: Yes
		IARC	Group 1: No; Group 2a: No; Group 2b: Yes; Group 3: No; Group 4: No;
0000108-88-3	Toluene	OSHA	Select Carcinogen: No
		NTP	Known: No; Suspected: No
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: Yes; Group 4: No;
		OSHA	Select Carcinogen: No

Safety Data Sheet



Revision Date: 2016-08-17

0064742-94-5	Solvent naphtha	NTP	Known: No; Suspected: No
	(petroleum), heavy	IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;

Exposure controls

Respiratory	None required; however, use of adequate ventilation is good industrial practice.
Eyes	Avoid contact with eyes. Chemical splash goggles.
Skin	Avoid contact with skin and clothing. Wear clothing and footwear that cannot be penetrated by chemicals or oil. Wear gloves that cannot be penetrated by chemicals or oil.
Engineering Controls	Provide adequate ventilation. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and any vapor below occupational exposure limits suitable respiratory protection must be worn.
Other Work Practices	Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

See section 2 for further details. - [Prevention]:

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Yellow
Odor threshold	Not Measured
pH	Not Measured
Melting point / freezing point	Not Measured
Initial boiling point and boiling range	287-650°F (ASTM D-86)
Flash Point	Closed cup: >37°C (>100°F)
Evaporation rate (Ether = 1)	Not Measured
Flammability (solid, gas)	Not Applicable
Upper/lower flammability or explosive limits	Lower Explosive Limit: Not Measured; Upper Explosive Limit: Not Measured
Vapor pressure (Pa)	Not Measured
Vapor Density	Not Measured
Specific Gravity	0.90 - 0.935
Solubility in Water	Slight
Partition coefficient n-octanol/water (Log Kow)	Not Measured
Auto-ignition temperature	Not Measured
Decomposition temperature	Not Measured
Viscosity (cSt)	Not Measured
Other information:	No other relevant information.

SECTION 10: STABILITY AND REACTIVITY

Reactivity: Hazardous Polymerization will not occur.
Chemical stability: Stable under normal circumstances.
Possibility of hazardous reactions: No data available.
Conditions to avoid: Keep away from heat, sparks and flame.
Incompatible materials: Strong oxidizing agents and acids.

Safety Data Sheet



Revision Date: 2016-08-17

Hazardous decomposition products: Products of Combustion: Carbon oxides (CO, CO₂) and other hazardous substances.

SECTION 11: TOXICOLOGICAL INFORMATION

ACUTE TOXICITY

Exposure to solvent vapor concentrations from the component solvents in excess of the stated occupational exposure limits may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Symptoms include headache, nausea, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness.

Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin resulting in dryness, irritation and possible non-allergic contact dermatitis. Solvents may also be absorbed through the skin. Splashes of liquid in the eyes may cause irritation and soreness with possible reversible damage.

CARCINOGENICITY

Materials in this product have been shown to cause skin tumors in mice after severe skin irritation and sometimes a long latency period.

GENOTOXICITY

Hydrotreated & hydrodesulfurized gas oils range in activity from inactive to weakly-positive in in-vitro bacterial mutagenicity assays.

Ingredient	Oral LD50, mg/kg	Skin LD50, mg/kg	Inhalation Vapor LC50, mg/L/4hr	Inhalation Dust/Mist LC50, mg/L/4hr	Inhalation Gas LC50, ppm
Solvent naphtha (petroleum), heavy aromatic - (64742-94-5)	> 5,000.00, Rat - Category: NA	>2,000.00, Rabbit - Category: 5	No data available	No data available	No data available
Naphthalene - (91-20-3)	490.00, Rat - Category: 4	20,000.00, Rabbit - Category: NA	No data available	No data available	100.00, Rat - Category: NA
Toluene - (108-88-3)	636.00, Rat - Category: 4	8,400.00, Rabbit - Category: NA	No data available	No data available	No data available

Note: When no route specific LD50 data is available for an acute toxin, the converted acute toxicity point estimate was used in the calculation of the product's ATE (Acute Toxicity Estimate).

Classification	Category	Hazard Description
Acute toxicity (oral)	5	May be harmful if swallowed. (Not adopted by US OSHA)
Acute toxicity (dermal)	---	Not Applicable
Acute toxicity (inhalation)	3	Toxic if inhaled.
Skin corrosion/irritation	---	Not Applicable
Serious eye damage/irritation	---	Not Applicable
Respiratory sensitization	---	Not Applicable
Skin sensitization	---	Not Applicable
Germ cell mutagenicity	---	Not Applicable
Carcinogenicity	2	Suspected of causing cancer.
Reproductive toxicity	2	Suspected of damaging the unborn child.
STOT-single exposure	---	Not Applicable
STOT-repeated exposure	---	Not Applicable
Aspiration hazard	1	May be fatal if swallowed and enters airways.

Safety Data Sheet



Revision Date: 2016-08-17

SECTION 12: ECOLOGICAL INFORMATION

TOXICITY

Toxic to aquatic life with long lasting effects.

No additional information provided for this product. See Section 3 for chemical specific data.

AQUATIC ECOTOXICITY

Ingredient	96 hr LC50 fish, mg/l	48 hr EC50 crustacea, mg/l	ErC50 algae, mg/l
Solvent naphtha (petroleum), heavy aromatic - (64742-94-5)	45.00, Pimephales promlelas	12.00, Daphnia magna	2.50 (72 hr), Skeletonema costatum
Naphthalene - (91-20-3)	0.99, Oncorhynchus gorbuscha	1.60, Daphnia magna	68.21 (96 hr), Scenedesmus subspicatus
Toluene - (108-88-3)	5.80, Oncorhynchus mykiss	19.60, Daphnia magna	Not Available

Persistence and degradability: There is no data available on the preparation itself.

Bioaccumulative potential: Not Measured

Mobility in soil: No data available.

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

Other adverse effects: No data available.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste treatment methods: Observe all federal, state and local regulations when disposing of this substance.

SECTION 14: TRANSPORT INFORMATION

	DOT (Domestic Surface Transportation)	IMO / IMDG (Ocean Transportation)	ICAO/IATA
UN number	NA1993	Not Regulated	Not Regulated
UN proper shipping name	Combustible liquid, n.o.s., (contains naphthalene)	Not Regulated	Not Regulated
Transport hazard class(es)	DOT Hazard Class: 3	IMDG: Not Applicable Sub Class: Not Applicable	Air Class: Not Applicable
Packing group	III	Not Applicable	Not Applicable

Environmental hazards

IMDG: Marine Pollutant: Yes (Solvent naphtha (petroleum), heavy aromatic)

Special precautions for user

No further information.

SECTION 15: REGULATORY INFORMATION

Regulatory Overview

The regulatory data in Section 15 is not intended to be all-inclusive, only selected regulations are represented.

Safety Data Sheet



Revision Date: 2016-08-17

Toxic Substance Control Act (TSCA) All components of this material are either listed or exempt from listing on the TSCA Inventory.
WHMIS Classification B3 D1B

US EPA TIER II HAZARDS

Fire: Yes

Sudden Release of Pressure: No

Reactive: No

Immediate (Acute): Yes

Delayed (Chronic): Yes

EPCRA 311/312 Chemicals and RQs (lbs): Naphthalene (100.00)

EPCRA 302 Extremely Hazardous: To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

EPCRA 313 Toxic Chemicals: Naphthalene

Proposition 65 - Carcinogens (>0.0%): Naphthalene

Proposition 65 - Developmental Toxins (>0.0%): Toluene

Proposition 65 - Female Repro Toxins (>0.0%): To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 - Male Repro Toxins (>0.0%): To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

New Jersey RTK Substances (>1%): Naphthalene

Pennsylvania RTK Substances (>1%): Naphthalene

SECTION 16: OTHER INFORMATION

The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, expressed or implied, is made with respect to the information contained herein. We accept no responsibility and disclaim all liability for any harmful effects which may be caused by exposure to our products. Customers/users of this product must comply with all applicable health and safety laws, regulations, and orders.

The full text of the phrases appearing in section 3 is: H225 Highly flammable liquid and vapor.

H302 Harmful if swallowed.

H304 May be fatal if swallowed and enters airways. H315 Causes skin irritation.

H336 May cause drowsiness and dizziness. H351 Suspected of causing cancer.

H361d Suspected of damaging the unborn child.

H373 May cause damage to organs through prolonged or repeated exposure. H400 Very toxic to aquatic life.

H401 Toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects. H411 Toxic to aquatic life with long lasting effects.

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 ANSI Z400 1.