

## Safety Data Sheet



### Section 1: Identification

#### Product identifier

##### Product Name

- **RDV-01 Hydrocarbon Treatment**

##### Synonyms

- Treatment reducer of: Asphaltenes, Paraffins, Foam, Viscosity, H<sub>2</sub>S and Emulsion and permanent improvement of °API For Light Crudes and Condensates

#### Relevant identified uses of the substance or mixture and uses advised against

##### Recommended use

- Consult manufacturer for the recommended product use

#### Details of the supplier of the safety data sheet

##### Manufacturer

- GlobalQuimica Partners LLC  
1250 Indiana Street  
Humble, TX 77396  
United States  
www.globalquimica-na.com  
rlawrence@globalquimica-na.com

##### Telephone (General)

- 281-446-8028

#### Emergency telephone number

##### Manufacturer

- 281-446-8028

### Section 2: Hazard Identification

#### United States (US)

According to: OSHA 29 CFR 1910.1200 HCS

#### Classification of the substance or mixture

##### OSHA HCS 2012

- Aspiration 1  
Eye Irritation 2  
Flammable Liquids 4

#### Label elements

##### OSHA HCS 2012

**DANGER**



#### Hazard statements •

May be fatal if swallowed and enters airways  
May cause eye irritation  
Combustible Liquid (does not sustain combustion)

May cause drowsiness or dizziness

## Precautionary statements

- Prevention** • Avoid breathing mist, vapours and/or spray.  
Wash thoroughly after handling.  
Use only outdoors or in a well-ventilated area.  
Wear protective gloves/protective clothing/eye protection/face protection.
- Response** • IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.  
Call a POISON CENTER or doctor/physician if you feel unwell.  
If on skin: Wash with plenty of water.  
Specific treatment, see supplemental first aid information.  
Take off contaminated clothing and wash before reuse.  
If skin irritation occurs: Get medical advice/attention.  
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
If eye irritation persists: Get medical advice/attention.  
IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.  
Do NOT induce vomiting.
- Storage/Disposal** • Store in a well-ventilated place. Keep container tightly closed.  
Store locked up.  
Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

## Other hazards

- OSHA HCS 2012** • Under United States Regulations (29 CFR 1910.1200 - Hazard Communication Standard), this product is considered hazardous.

## Canada

According to: WHMIS

## Classification of the substance or mixture

- WHMIS** • Toxic - D1B  
Other Toxic Effects - D2B  
Combustible Liquids - B3

## Label elements

- WHMIS** •  

- WHMIS** • Toxic - D1B  
Other Toxic Effects - D2B  
Combustible Liquids - B3

## Other hazards

- WHMIS** • In Canada, the product mentioned above is considered hazardous under the Workplace Hazardous Materials Information System (WHMIS).

## Section 3 - Composition/Information on Ingredients

### Substances

- Material does not meet the criteria of a substance.

### Mixtures

Composition					
Chemical Name	Identifiers	%	LD50/LC50	Classifications According to Regulation/Directive	Comments
Proprietary Ingredient 1	Proprietary	N/A	Ingestion/Oral-Rat LD50 • 15 g/kg	<b>OSHA HCS 2012:</b> Flam. Liq. 3; Skin Irrit. 2; STOT SE 3: Narc.; Asp. Tox. 1	NDA
Proprietary Ingredient 2	Proprietary	N/A	Ingestion/Oral-Rat LD50 • 25000 mg/kg	<b>OSHA HCS 2012:</b> Eye Irrit 2; Skin Irrit. 2	NDA
Proprietary Ingredient 3	Proprietary	N/A	NDA	<b>OSHA HCS 2012:</b> Acute Tox. 4 (orl); Skin Corr. 1; Eye Dam. 1; STOT SE 3: Narc.	NDA
Proprietary Ingredient 4	Proprietary	N/A	Inhalation-Rat LC50 • 3124 ppm 1 Hour(s)	<b>OSHA HCS 2012:</b> Skin Corr. 1B; Eye Corr. 1;	NDA
Proprietary Ingredient 5	Proprietary	N/A	Ingestion/Oral-Rat LD50 • 1.25 g/kg Inhalation-Rat LC50 • 25.5 mg/m <sup>3</sup>	<b>OSHA HCS 2012:</b> Skin Corr. 1C; Eye Dam. 1; Acute Tox. 4 (orl)	NDA
Proprietary Ingredient 6	Proprietary	N/A	Ingestion/Oral-Rat LD50 • 3 g/kg	<b>OSHA HCS 2012:</b> Comb. Dust; Skin Irrit. 2; Eye Irrit. 2; STOT SE 3: Resp. Irrit.	NDA

## Section 4: First-Aid Measures

### Description of first aid measures

- Inhalation**
- Move victim to fresh air. Administer oxygen if breathing is difficult. Give artificial respiration if victim is not breathing. If signs/symptoms continue, get medical attention.
- Skin**
- In case of contact with substance, immediately flush skin with running water for at least 20 minutes. Remove and isolate contaminated clothing. Wash skin with soap and water. If irritation develops and persists, get medical attention.
- Eye**
- In case of contact with substance, immediately flush eyes with running water for at least 20 minutes. If eye irritation persists: Get medical advice/attention.
- Ingestion**
- Do NOT induce vomiting. Get medical attention immediately.

### Most important symptoms and effects, both acute and delayed

- Refer to Section 11 - Toxicological Information.

### Indication of any immediate medical attention and special treatment needed

- Notes to Physician**
- All treatments should be based on observed signs and symptoms of distress in the patient. Consideration should be given to the possibility that overexposure to materials other than this product may have occurred.

## Section 5: Fire-Fighting Measures

### Extinguishing media

- Suitable Extinguishing Media**
- LARGE FIRE: Water spray, fog or regular foam.  
SMALL FIRES: Dry chemical, CO<sub>2</sub>, water spray or regular foam.
- Unsuitable Extinguishing Media**
- No data available

### Special hazards arising from the substance or mixture

- Unusual Fire and Explosion Hazards**
- No data available
- Hazardous Combustion Products**
- No data available

### Advice for firefighters

Preparation Date: 04/June/2015

Format: GHS Language: English (US)

Revision Date: 13/June/2017

- Structural firefighters' protective clothing provides limited protection in fire situations ONLY; it is not effective in spill situations where direct contact with the substance is possible.  
Wear chemical protective clothing that is specifically recommended by the manufacturer. It may provide little or no thermal protection.  
Wear positive pressure self-contained breathing apparatus (SCBA).

## Section 6 - Accidental Release Measures

### Personal precautions, protective equipment and emergency procedures

#### Personal Precautions

- Ventilate enclosed areas. Do not walk through spilled material. Wear appropriate personal protective equipment, avoid direct contact. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.

#### Emergency Procedures

- As an immediate precautionary measure, isolate spill or leak area in all directions for at least 50 meters (150 feet) for liquids and at least 25 meters (75 feet) for solids. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Stay upwind. Keep out of low areas. Keep unauthorized personnel away.

### Environmental precautions

- Avoid run off to waterways and sewers.

### Methods and material for containment and cleaning up

#### Containment/Clean-up Measures

- Stop leak if you can do it without risk.  
SMALL SPILLS: Take up with sand or other non-combustible absorbent material and place into containers for later disposal.  
LARGE SPILLS: Dike far ahead of spill for later disposal.

## Section 7 - Handling and Storage

### Precautions for safe handling

#### Handling

- Use only with adequate ventilation. Wear appropriate personal protective equipment, avoid direct contact. Avoid contact with skin, eyes, and clothing. Wash thoroughly with soap and water after handling and before eating, drinking, or using tobacco.

### Conditions for safe storage, including any incompatibilities

#### Storage

- Store in a well-ventilated place. Keep container tightly closed. Store locked up.

## Section 8 - Exposure Controls/Personal Protection

### Control parameters

Exposure Limits/Guidelines				
	Result	ACGIH	NIOSH	OSHA
Proprietary Ingredient 4 (Proprietary)	Ceilings	2 ppm Ceiling	5 ppm Ceiling; 7 mg/m <sup>3</sup> Ceiling	5 ppm Ceiling; 7 mg/m <sup>3</sup> Ceiling
Proprietary Ingredient 3 (Proprietary)	TWAs	1 mg/m <sup>3</sup> TWA	1 mg/m <sup>3</sup> TWA	1 mg/m <sup>3</sup> TWA
	STELs	2 mg/m <sup>3</sup> STEL	2 mg/m <sup>3</sup> STEL	Not established
Proprietary Ingredient 5 (Proprietary)	TWAs	1 mg/m <sup>3</sup> TWA	1 mg/m <sup>3</sup> TWA	1 mg/m <sup>3</sup> TWA
	STELs	3 mg/m <sup>3</sup> STEL	3 mg/m <sup>3</sup> STEL	Not established
Proprietary Ingredient 1 (Proprietary)	TWAs	200 mg/m <sup>3</sup> TWA (application restricted to conditions in which there are negligible aerosol exposures, total hydrocarbon vapor)	100 mg/m <sup>3</sup> TWA	Not established

## Exposure controls

### Engineering Measures/Controls

- Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

### Personal Protective Equipment

#### Respiratory

- In case of insufficient ventilation, wear suitable respiratory equipment.

#### Eye/Face

- Wear chemical splash safety goggles.

#### Skin/Body

- Wear appropriate gloves.

### Environmental Exposure Controls

- Controls should be engineered to prevent release to the environment, including procedures to prevent spills, atmospheric release and release to waterways. Follow best practice for site management and disposal of waste.

### Key to abbreviations

ACGIH = American Conference of Governmental Industrial Hygiene

STEL = Short Term Exposure Limits are based on 15-minute exposures

NIOSH = National Institute of Occupational Safety and Health

TWA = Time-Weighted Averages are based on 8h/day, 40h/week exposures

OSHA = Occupational Safety and Health Administration

## Section 9 - Physical and Chemical Properties

### Information on Physical and Chemical Properties

Material Description			
Physical Form	Liquid	Appearance/Description	Light brown, transparent liquid with a hydrocarbon, petroleum odor.
Color	Light Brown.	Odor	Mild petroleum.
Odor Threshold	> 1500 ppm		
General Properties			
Boiling Point	392 to 716 °F(200 to 380 °C)	Melting Point/Freezing Point	12 °F(-11.1111 °C)
Decomposition Temperature	> 760 °F(> 404.4444 °C)	pH	6.27
Specific Gravity/Relative Density	= (0.865-0.875) Water=1	Water Solubility	Negligible < 0.1 %
Viscosity	16.17 Centistoke (cSt, cS) or mm <sup>2</sup> /sec @ 75 °F(23.8889 °C)		
Volatility			
Vapor Pressure	1.2 psia @ 100 °F(37.7778 °C)	Vapor Density	> 1 Air=1
Evaporation Rate	Slow, Varies with Condition	VOC (Wt.)	0 %
VOC (Vol.)	0 %	Volatiles (Wt.)	0 %
Volatiles (Vol.)	0 %		
Flammability			
Flash Point	187 °F(86.1111 °C)	UEL	7.6 %
LEL	0.6 %	Autoignition	835 °F(446.1111 °C)
Flammability (solid, gas)	No data available	Sustained Combustion	<15 sec, does not sustain combustion
Environmental			
Octanol/Water Partition coefficient	No data available		

## Section 10: Stability and Reactivity

### Reactivity

- No dangerous reaction known under conditions of normal use.

## Chemical stability

- Stable under normal temperatures and pressures.

## Possibility of hazardous reactions

- Hazardous polymerization will not occur.

## Conditions to avoid

- No data available.

## Incompatible materials

- No data available.

## Hazardous decomposition products

- None known.

## Section 11 - Toxicological Information

### Information on toxicological effects

Components		
Proprietary Ingredient 1 (N/A)	Proprietary	<p><b>Acute Toxicity:</b> Ingestion/Oral-Rat LD50 • 15 g/kg; <i>Skin and Appendages:After topical exposure:Corrosive</i>; Ingestion/Oral-Dog LDLo • 4 g/kg; <i>Lungs, Thorax, or Respiration:Structural or functional change in trachea or bronchi</i>; <i>Lungs, Thorax, or Respiration:Acute pulmonary edema</i>; Inhalation-Rat LC50 • &gt;5000 mg/m<sup>3</sup> 4 Hour(s); <i>Behavioral:Somnolence (general depressed activity)</i>; Inhalation-Rat LCLo • &gt;5 g/m<sup>3</sup> 4 Hour(s); <i>Behavioral:Somnolence (general depressed activity)</i>; Inhalation-Dog TClO • 2500 mg/m<sup>3</sup> 2 Hour(s); Skin -Rabbit LD50 • &gt;2000 mg/kg;</p> <p><b>Irritation:</b> Skin-Rabbit • 500 mg • Severe irritation;</p> <p><b>Multi-dose Toxicity:</b> Inhalation-Human TClO • 0.15 mg/m<sup>3</sup> 5 Year(s)-Intermittent; <i>Lungs, Thorax, or Respiration:Fibrosis (interstitial)</i>; Inhalation-Rabbit TClO • 300 mg/m<sup>3</sup> 12 Week(s)-Intermittent; <i>Blood:Normocytic anemia</i>; <i>Blood:Leukopenia</i>; Skin-Rabbit TDLo • 4500 mg/kg 3 Week(s)-Intermittent; <i>Blood:Pigmented or nucleated red blood cells</i>; <i>Skin and Appendages:After systemic exposure:Dermatitis, other</i>; <i>Nutritional and Gross Metabolic:Gross Metabolite Changes:Weight loss or decreased weight gain</i></p>
Proprietary Ingredient 2 (N/A)	Proprietary	<p><b>Acute Toxicity:</b> Ingestion/Oral-Rat LD50 • 25000 mg/kg;</p> <p><b>Irritation:</b> Eye-Rabbit • 100 mg • Mild irritation; Skin-Human • 15 mg 3 Day(s)-Intermittent • Moderate irritation;</p> <p><b>Multi-dose Toxicity:</b> Skin-Mouse TDLo • 1500 mg/kg 3 Day(s)-Intermittent; <i>Blood:Other changes</i></p>
Proprietary Ingredient 3 (N/A)	Proprietary	<p><b>Irritation:</b> Eye-Rabbit • 250 µg 24 Hour(s) • Severe irritation; Skin-Rabbit • 500 mg 24 Hour(s) • Mild irritation;</p> <p><b>Reproductive:</b> Ingestion/Oral-Mouse TDLo • 275 mg/kg (multigenerations); <i>Reproductive Effects:Specific Developmental Abnormalities:Urogenital system</i>; <i>Reproductive Effects:Effects on Newborn:Live birth index</i></p>
Proprietary Ingredient 4 (N/A)	Proprietary	<p><b>Acute Toxicity:</b> Inhalation-Rat LC50 • 7004 mg/m<sup>3</sup> 30 Minute(s); <i>Lungs, Thorax, or Respiration:Acute pulmonary edema</i>;</p> <p><b>Mutagen:</b> Cytogenetic analysis • Unreported Route-Hamster • Ovary (Somatic cell) • 8 mmol/L;</p> <p><b>Reproductive:</b> Inhalation-Rat TClO • 450 mg/m<sup>3</sup> 1 Hour(s)(1D pre); <i>Reproductive Effects:Effects on Embryo or Fetus:Fetotoxicity (except death, e.g., stunted fetus)</i>; <i>Reproductive Effects:Specific Developmental Abnormalities:Homeostasis</i></p>
Proprietary Ingredient 5 (N/A)	Proprietary	<p><b>Acute Toxicity:</b> Ingestion/Oral-Rat LD50 • 1.25 g/kg; <i>Lungs, Thorax, or Respiration:Acute pulmonary edema</i>;</p> <p><b>Liver:Changes in liver weight</b>; Inhalation-Rat LC50 • 25.5 mg/m<sup>3</sup>; <i>Lungs, Thorax, or Respiration:Acute pulmonary edema</i>; <b>Liver:Changes in liver weight</b></p>
Proprietary Ingredient 6 (N/A)	Proprietary	<p><b>Acute Toxicity:</b> Ingestion/Oral-Rat LD50 • 3 g/kg; Inhalation-Rat TClO • 180 mg/m<sup>3</sup>; <i>Lungs, Thorax, or Respiration:Other changes</i>; <b>Liver:Liver function tests impaired</b>; <i>Biochemical:Enzyme inhibition, induction, or change in blood or tissue levels:Dehydrogenases</i>;</p> <p><b>Irritation:</b> Eye-Rabbit • 750 µg 24 Hour(s) • Severe irritation; Skin-Rabbit • 500 mg 24 Hour(s) • Mild irritation</p>

GHS Properties	Classification
----------------	----------------

<b>STOT-SE</b>	<b>OSHA HCS 2012 • Specific Target Organ Toxicity Single Exposure 3: Narcotic Effects</b>
<b>Germ Cell Mutagenicity</b>	<b>OSHA HCS 2012 • No data available</b>
<b>Toxicity for Reproduction</b>	<b>OSHA HCS 2012 • No data available</b>
<b>Carcinogenicity</b>	<b>OSHA HCS 2012 • No data available</b>
<b>Aspiration Hazard</b>	<b>OSHA HCS 2012 • Aspiration 1</b>
<b>Respiratory sensitization</b>	<b>OSHA HCS 2012 • No data available</b>
<b>STOT-RE</b>	<b>OSHA HCS 2012 • No data available</b>
<b>Skin sensitization</b>	<b>OSHA HCS 2012 • No data available</b>
<b>Serious eye damage/Irritation</b>	<b>OSHA HCS 2012 • Eye Irritation 2</b>
<b>Skin corrosion/Irritation</b>	<b>OSHA HCS 2012 • No data available</b>
<b>Acute toxicity</b>	<b>OSHA HCS 2012 • No data available</b>

## Potential Health Effects

### Inhalation

- Acute (Immediate)**
- May affect the central nervous system. Symptoms may include dizziness, drowsiness, lethargy, coma and death.
- Chronic (Delayed)**
- No data available.

### Skin

- Acute (Immediate)**
- Causes skin irritation.
- Chronic (Delayed)**
- No data available.

### Eye

- Acute (Immediate)**
- No data available.
- Chronic (Delayed)**
- No data available.

### Ingestion

- Acute (Immediate)**
- Material may be aspirated into lungs during ingestion and/or subsequent vomiting. Aspiration of this material will cause severe lung injury, chemical pneumonitis, pulmonary edema or death.
- Chronic (Delayed)**
- No data available.

#### Key to abbreviations

LC = Lethal Concentration

LD = Lethal Dose

TC = Toxic Concentration

TD = Toxic Dose

## Section 12 - Ecological Information

### Toxicity

- Non-mandatory section - information about this substance not compiled for this reason.

### Persistence and degradability

- Non-mandatory section - information about this substance not compiled for this reason.

### Bioaccumulative potential

- Non-mandatory section - information about this substance not compiled for this reason.

## Mobility in Soil

- Non-mandatory section - information about this substance not compiled for this reason.

## Other adverse effects

- Non-mandatory section - information about this substance not compiled for this reason.

## Section 13 - Disposal Considerations

### Waste treatment methods

#### Product waste

- Product waste should be reused if possible. If it is not possible to reuse, take to waste treatment facility.

#### Packaging waste

- Packaging should be reused if possible. If it is not possible to reuse, take to waste treatment facility. Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

## Section 14 - Transport Information

	UN number	UN proper shipping name	Transport hazard class(es)	Packing group	Environmental hazards
DOT	Not Applicable	Not Dangerous Goods	Not Applicable	Not Applicable	NDA
TDG	Not Applicable	Not Dangerous Goods	Not Applicable	Not Applicable	NDA

**Special precautions for user** • None specified.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

## Section 15 - Regulatory Information

### Safety, health and environmental regulations/legislation specific for the substance or mixture

**SARA Hazard Classifications** • Acute, Chronic

Inventory				
Component	CAS	Canada DSL	Canada NDSL	TSCA
Proprietary Ingredient 6	Proprietary	Yes	No	Yes
Proprietary Ingredient 4	Proprietary	Yes	No	Yes
Proprietary Ingredient 1	Proprietary	Yes	No	Yes
Proprietary Ingredient 2	Proprietary	Yes	No	Yes
Proprietary Ingredient 3	Proprietary	Yes	No	Yes
Proprietary Ingredient 5	Proprietary	Yes	No	Yes

Additional Regulatory information not stated because this is a non-mandatory section.



## Section 16 - Other Information

### NFPA Codes



### Revision Date

- 13/June/2017

### Preparation Date

- 04/June/2015
- No data available

### Disclaimer/Statement of Liability

The information in this SDS was obtained from sources which we believe are reliable but cannot guarantee. Additionally, your use of this information is beyond our control and may be beyond our knowledge. Therefore, the information is provided without any representation or warranty express or implied.

### Key to abbreviations

NDA = No Data Available