

Safety Data Sheet

acc. to OSHA HCS (29CFR 1910.1200) and WHMIS 2015 Regulations

Printing date: February 23, 2018

Revision: February 23, 2018

1 Identification

- **Product identifier**
- **Trade name: Red Solvent Based Adhesive Low VOC**
- **Product code: #5138 (RPG1LVOC); #5139 (RPG5LVOC)**
- **Recommended use and restriction on use**
- **Recommended use:** Adhesives
- **Restrictions on use:** No relevant information available.
- **Details of the supplier of the Safety Data Sheet**
- **Manufacturer/Supplier:**
DURO DYNE CORPORATION
81 Spence Street
Bay Shore, NY 11706
800-899-3876
- **Emergency telephone number:**
ChemTel Inc.
(800)255-3924 (North America)
+1 (813)248-0585 (International)

2 Hazard(s) identification

- **Classification of the substance or mixture**
Flam. Liq. 2 H225 Highly flammable liquid and vapor.
Skin Irrit. 2 H315 Causes skin irritation.
Eye Irrit. 2A H319 Causes serious eye irritation.
STOT SE 3 H336 May cause drowsiness or dizziness.
Asp. Tox. 1 H304 May be fatal if swallowed and enters airways.
- **Label elements**
- **GHS label elements**
The product is classified and labeled according to the Globally Harmonized System (GHS).
- **Hazard pictograms:**

GHS02 GHS07 GHS08
- **Signal word:** Danger
- **Hazard statements:**
H225 Highly flammable liquid and vapor.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H336 May cause drowsiness or dizziness.
H304 May be fatal if swallowed and enters airways.
- **Precautionary statements:**
P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
P233 Keep container tightly closed.
P240 Ground/bond container and receiving equipment.
P241 Use explosion-proof electrical/ventilating/lighting/equipment.
P242 Use only non-sparking tools.

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- P243 Take precautionary measures against static discharge.
- P261 Avoid breathing mist, vapors, or spray.
- P264 Wash thoroughly after handling.
- P271 Use only outdoors or in a well-ventilated area.
- P280 Wear protective gloves/protective clothing/eye protection.
- P301+P310 If swallowed: Immediately call a poison center/doctor.
- P303+P361+P353 If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
- P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
- P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P312 Call a poison center/doctor if you feel unwell.
- P331 Do NOT induce vomiting.
- P332+P313 If skin irritation occurs: Get medical advice/attention.
- P337+P313 If eye irritation persists: Get medical advice/attention.
- P362+P364 Take off contaminated clothing and wash it before reuse.
- P370+P378 In case of fire: Use foam, powder, or carbon dioxide for extinction.
- P403+P235 Store in a well-ventilated place. Keep cool.
- P405 Store locked up.
- P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

· **Other hazards** There are no other hazards not otherwise classified that have been identified.

3 Composition/information on ingredients

· **Chemical characterization: Mixtures**

· **Components:**

79-20-9	methyl acetate ⚠ Flam. Liq. 2, H225 ⚠ Eye Irrit. 2A, H319; STOT SE 3, H336	40-60%
142-82-5	heptane ⚠ Flam. Liq. 2, H225 ⚠ Asp. Tox. 1, H304 ⚠ Skin Irrit. 2, H315; STOT SE 3, H336 ⚠ Eye Irrit. 2B, H320	10-20%
38123-09-0	Ammonium Carbamodithioic acid(2-hydroxyethyl)- ⚠ Skin Irrit. 2, H315; Eye Irrit. 2A, H319	<3%

· **Additional information:**

For the listed ingredient(s), the identity and/or exact percentage(s) are being withheld as a trade secret.
 For the wording of the listed Hazard Statements, refer to section 16.

4 First-aid measures

· **Description of first aid measures**

· **After inhalation:**

Supply fresh air; consult doctor in case of complaints.
 Provide oxygen treatment if affected person has difficulty breathing.

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In case of unconsciousness place patient stably in side position for transportation.

· After skin contact:

Immediately remove any clothing soiled by the product.
Immediately wash with water and soap and rinse thoroughly.
If skin irritation continues, consult a doctor.

· After eye contact:

Remove contact lenses if worn.
Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

· After swallowing:

Rinse out mouth and then drink plenty of water.
Do not induce vomiting; immediately call for medical help.
A person vomiting while lying on their back should be turned onto their side.

· Most important symptoms and effects, both acute and delayed:

Headache
Breathing difficulty
Dizziness
Coughing
Irritant to skin and mucous membranes.
Causes eye irritation.
Gastric or intestinal disorders when ingested.
Nausea in case of ingestion.

· Danger:

Danger of impaired breathing.
Danger of disturbed cardiac rhythm.
May cause drowsiness or dizziness.
May be fatal if swallowed and enters airways.

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

Medical supervision for at least 48 hours.
If swallowed or in case of vomiting, danger of entering the lungs.
Later observation for pneumonia and pulmonary edema.
Monitor circulation, possible shock treatment.
If necessary oxygen respiration treatment.

5 Fire-fighting measures**· Extinguishing media****· Suitable extinguishing agents:**

Water fog / haze
Foam
Gaseous extinguishing agents
Fire-extinguishing powder

· For safety reasons unsuitable extinguishing agents: Water stream.**· Special hazards arising from the substance or mixture**

Formation of toxic gases is possible during heating or in case of fire.

· Advice for firefighters**· Protective equipment:**

Wear self-contained respiratory protective device.
Wear fully protective suit.

· Additional information:

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Eliminate all ignition sources if safe to do so.
Cool endangered containers with water fog.

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6 Accidental release measures

Personal precautions, protective equipment and emergency procedures

Use respiratory protective device against the effects of fumes/dust/aerosol.

Ensure adequate ventilation.

Use personal protective equipment as required.

Keep away from ignition sources.

Protect from heat

Environmental precautions

Do not allow to enter sewers/ surface or ground water.

Inform respective authorities in case of seepage into water course or sewage system.

Methods and material for containment and cleaning up

Absorb with non-combustible liquid-binding material (sand, diatomite, acid binders, universal binders).

Send for recovery or disposal in suitable receptacles.

Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

7 Handling and storage

Handling**Precautions for safe handling:**

Use only in well ventilated areas.

Prevent formation of aerosols.

Avoid splashes or spray in enclosed areas.

Avoid breathing mist, vapors, or spray.

Keep out of reach of children.

Information about protection against explosions and fires:

Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

Do not spray on a naked flame or any incandescent material.

Fumes can combine with air to form an explosive mixture.

Flammable gas-air mixtures may be formed in empty containers/receptacles.

Emergency cooling must be available in case of nearby fire.

Keep respiratory protective device available.

Conditions for safe storage, including any incompatibilities**Requirements to be met by storerooms and receptacles:**

Avoid storage near extreme heat, ignition sources or open flame.

Provide ventilation for receptacles.

Information about storage in one common storage facility:

Store away from foodstuffs.

Store away from oxidizing agents.

Further information about storage conditions: Store in cool, dry conditions in well sealed receptacles.**Specific end use(s)** No relevant information available.

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8 Exposure controls/personal protection

· Control parameters

· Components with limit values that require monitoring at the workplace:

79-20-9 methyl acetate

PEL (USA)	Long-term value: 610 mg/m ³ , 200 ppm
REL (USA)	Short-term value: 760 mg/m ³ , 250 ppm Long-term value: 610 mg/m ³ , 200 ppm
TLV (USA)	Short-term value: 757 mg/m ³ , 250 ppm Long-term value: 606 mg/m ³ , 200 ppm
EL (Canada)	Short-term value: 250 ppm Long-term value: 200 ppm
EV (Canada)	Short-term value: 755 mg/m ³ , 250 ppm Long-term value: 605 mg/m ³ , 200 ppm
LMPE (Mexico)	Short-term value: 250 ppm Long-term value: 200 ppm

142-82-5 heptane

PEL (USA)	Long-term value: 2000 mg/m ³ , 500 ppm
REL (USA)	Long-term value: 350 mg/m ³ , 85 ppm Ceiling limit value: 1800* mg/m ³ , 440* ppm *15-min
TLV (USA)	Short-term value: 2050 mg/m ³ , 500 ppm Long-term value: 1640 mg/m ³ , 400 ppm
EL (Canada)	Short-term value: 500 ppm Long-term value: 400 ppm
EV (Canada)	Short-term value: 2.045 mg/m ³ , 500 ppm Long-term value: 1.635 mg/m ³ , 400 ppm
LMPE (Mexico)	Short-term value: 500 ppm Long-term value: 400 ppm

· Exposure controls

· General protective and hygienic measures:

The usual precautionary measures for handling chemicals should be followed.

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing.

Pregnant women should strictly avoid inhalation or skin contact.

Wash hands before breaks and at the end of work.

Do not inhale gases / fumes / aerosols.

Avoid contact with the eyes and skin.

· Engineering controls: No relevant information available.

· Breathing equipment:

Wear appropriate NIOSH respirator when ventilation is inadequate and occupational exposure limits are exceeded.

· Protection of hands:

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Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

· **Eye protection:**



Safety glasses

· **Body protection:** Protective work clothing

· **Limitation and supervision of exposure into the environment**

Avoid release to the environment.

9 Physical and chemical properties

· **Information on basic physical and chemical properties**

· **Appearance:**

Form: Liquid
 Color: According to product specification

· **Odor:** Solvent-like

· **Odor threshold:** Not determined.

· **pH-value:** Not determined.

· **Melting point/Melting range:** Not determined.

· **Boiling point/Boiling range:** >35 °C (>95 °F)

· **Flash point:** <23 °C (<73.4 °F)

· **Flammability (solid, gaseous):** Not applicable.

· **Auto-ignition temperature:** Not determined.

· **Decomposition temperature:** Not determined.

· **Danger of explosion:** Product is not explosive. However, formation of explosive air/vapor mixtures are possible.

· **Explosion limits**

Lower: Not determined.

Upper: Not determined.

· **Oxidizing properties:** Non-oxidizing.

· **Vapor pressure:** Not determined.

· **Density:**

Relative density: <1

Vapor density: Not determined.

Evaporation rate: Not determined.

· **Solubility in / Miscibility with**

Water: Not miscible or difficult to mix.

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- **Partition coefficient (n-octanol/water):** Not determined.
- **Viscosity**
 - Dynamic:** Not determined.
 - Kinematic:** Not determined.
- **Other information** No relevant information available.

10 Stability and reactivity

- **Reactivity:** No relevant information available.
- **Chemical stability:**
- **Thermal decomposition / conditions to be avoided:** Keep away from heat and direct sunlight.
- **Possibility of hazardous reactions**
 - Highly flammable liquid and vapor.
 - Reacts violently with oxidizing agents.
 - Reacts with strong acids.
 - Used empty containers may contain product gases which form explosive mixtures with air.
 - Can form explosive mixtures in air if heated above flash point and/or when sprayed or atomized.
 - Toxic fumes may be released if heated above the decomposition point.
- **Conditions to avoid**
 - Keep ignition sources away - Do not smoke.
 - Store away from oxidizing agents.
- **Incompatible materials** Oxidizers
- **Hazardous decomposition products**
 - Carbon monoxide and carbon dioxide
 - Hydrocarbons
 - Nitrogen oxides (NO_x)
 - Chlorine compounds

11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:** Based on available data, the classification criteria are not met.

LD/LC50 values that are relevant for classification:**79-20-9 methyl acetate**

Oral | LD50 | 3705 mg/kg (rabbit)

142-82-5 heptane

Oral | LD50 | >5000 mg/kg (rat)

- **Primary irritant effect:**
- **On the skin:** Irritant to skin and mucous membranes.
- **On the eye:** Irritating effect.
- **Sensitization:** No sensitizing effects known.

IARC (International Agency for Research on Cancer):

None of the ingredients are listed.

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· NTP (National Toxicology Program):

None of the ingredients are listed.

· OSHA-Ca (Occupational Safety & Health Administration):

None of the ingredients are listed.

· Probable route(s) of exposure:

Ingestion.

Inhalation.

Eye contact.

Skin contact.

· Germ cell mutagenicity: Based on available data, the classification criteria are not met.**· Carcinogenicity:** Based on available data, the classification criteria are not met.**· Reproductive toxicity:** Based on available data, the classification criteria are not met.**· STOT-single exposure:** May cause drowsiness or dizziness.**· STOT-repeated exposure:** Based on available data, the classification criteria are not met.**· Aspiration hazard:** May be fatal if swallowed and enters airways.

12 Ecological information

· Toxicity**· Aquatic toxicity** Toxic to aquatic life with long lasting effects.**· Persistence and degradability** No relevant information available.**· Bioaccumulative potential:** No relevant information available.**· Mobility in soil:** No relevant information available.**· Ecotoxicological effects:****· Remark:** Toxic for fish**· Additional ecological information****· General notes:**

Do not allow product to reach ground water, water course or sewage system.

Due to available data on eliminability/decomposition and bioaccumulation potential prolonged term damage of the environment can not be excluded.

· Results of PBT and vPvB assessment**· PBT:** Not applicable.**· vPvB:** Not applicable.**· Other adverse effects** No relevant information available.

13 Disposal considerations

· Waste treatment methods**· Recommendation:**

Can be disposed of with household garbage after solidification following consultation with the waste disposal facility operator and the pertinent authorities and adhering to the necessary technical regulations.

The user of this material has the responsibility to dispose of unused material, residues and containers in compliance with all relevant local, state and federal laws and regulations regarding treatment, storage and disposal for hazardous and nonhazardous wastes.

· Uncleaned packagings**· Recommendation:** Disposal must be made according to official regulations.

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14 Transport information

<ul style="list-style-type: none"> · UN-Number 	UN1133
<ul style="list-style-type: none"> · DOT, ADR, IMDG, IATA 	
<ul style="list-style-type: none"> · UN proper shipping name 	Adhesives
<ul style="list-style-type: none"> · DOT, IATA · ADR, IMDG 	ADHESIVES
<ul style="list-style-type: none"> · Transport hazard class(es) 	
<ul style="list-style-type: none"> · DOT 	
<div style="text-align: center;">  </div>	
<ul style="list-style-type: none"> · Class · Label 	3 Flammable liquids 3
<ul style="list-style-type: none"> · ADR 	
<div style="text-align: center;">  </div>	
<ul style="list-style-type: none"> · Class · Label 	3 (F1) Flammable liquids 3
<ul style="list-style-type: none"> · IMDG, IATA 	
<div style="text-align: center;">  </div>	
<ul style="list-style-type: none"> · Class · Label 	3 Flammable liquids 3
<ul style="list-style-type: none"> · Packing group 	II
<ul style="list-style-type: none"> · DOT, ADR, IMDG, IATA 	
<ul style="list-style-type: none"> · Environmental hazards 	Product contains environmentally hazardous substances: heptane
<ul style="list-style-type: none"> · Marine pollutant: 	
<div style="display: flex; align-items: center;"> <div style="text-align: center; margin-right: 10px;">  </div> Yes </div>	
<ul style="list-style-type: none"> · Special precautions for user · Danger code (Kemler): · EMS Number: 	Warning: Flammable liquids 33 F-E,S-D

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· **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code** Not applicable.

· **Transport/Additional information:**

· **DOT**



Limited Quantity for packages less than 30 kg gross and inner packagings less than 5 L each.

Product is additionally classified as a MARINE POLLUTANT based on MARPOL and DOT rules. Labeling as a MARINE POLLUTANT is not required for non-bulk single package shipments by motor vehicle, rail car or aircraft. Bulk packaging consists of a maximum capacity of greater than 450L (119 gallons) for a liquid and a maximum net mass greater than 400kg (882 pounds) for a solid.

· **ADR**



Limited Quantity for packages less than 30 kg gross and inner packagings less than 5 L each.

Marine pollutants packaged in single or combination packagings containing a net quantity per single or inner packaging of 5 L or less for liquids or having a net mass per single or inner packaging of 5 kg or less for solids are not subject to provisions relevant to marine pollutants. (See 5.2.1.8.1)

· **IMDG**



Limited Quantity for packages less than 30 kg gross and inner packagings less than 5 L each.

Marine pollutants packaged in single or combination packagings containing a net quantity per single or inner packaging of 5 L or less for liquids or having a net mass per single or inner packaging of 5 kg or less for solids are not subject to provisions relevant to marine pollutants. (See 2.10.2.7)

· **IATA**



Limited Quantity for packages less than 30 kg gross and inner packagings less than 0.5 L each / 1 L net.

15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **United States (USA)**
- **SARA**
- **Section 302 (extremely hazardous substances):**

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None of the ingredients are listed.

· Section 355 (extremely hazardous substances):

None of the ingredients are listed.

· Section 313 (Specific toxic chemical listings):

None of the ingredients are listed.

· TSCA (Toxic Substances Control Act)

All ingredients are listed.

· Proposition 65 (California)**· Chemicals known to cause cancer:**

None of the ingredients are listed.

· Chemicals known to cause reproductive toxicity for females:

None of the ingredients are listed.

· Chemicals known to cause reproductive toxicity for males:

None of the ingredients are listed.

· Chemicals known to cause developmental toxicity:

None of the ingredients are listed.

· EPA (Environmental Protection Agency):

142-82-5 | heptane

D

· IARC (International Agency for Research on Cancer):

None of the ingredients are listed.

· NIOSH-Ca (National Institute for Occupational Safety and Health):

None of the ingredients are listed.

· Canadian Domestic Substances List (DSL):

All ingredients are listed.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· Date of preparation / last revision February 23, 2018 / -**· Abbreviations and acronyms:**

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bio-accumulable, Toxic

vPvB: very Persistent and very Bioaccumulative

NIOSH: National Institute for Occupational Safety and Health

OSHA: Occupational Safety & Health Administration

Flam. Liq. 2: Flammable liquids – Category 2

Skin Irrit. 2: Skin corrosion/irritation – Category 2

Eye Irrit. 2A: Serious eye damage/eye irritation – Category 2A

Eye Irrit. 2B: Serious eye damage/eye irritation – Category 2B

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STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

Asp. Tox. 1: Aspiration hazard – Category 1

· **Sources**

Website, European Chemicals Agency (echa.europa.eu)

Website, US EPA Substance Registry Services (ofmpub.epa.gov/sor_internet/registry/substreg/home/overview/home.do)

Website, Chemical Abstracts Registry, American Chemical Society (www.cas.org)

Patty's Industrial Hygiene, 6th ed., Rose, Vernon, ed. ISBN: 978-0-470-07488-6

Casarett and Doull's Toxicology: The Basic Science of Poisons, 8th Ed., Klaasen, Curtis D., ed., ISBN: 978-0-07-176923-5.

Safety Data Sheets, Individual Manufacturers

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