

**Safety Data Sheet**  
**R-1234yf PAG-150**  
**According to Regulation (EU) 2015/830**



Safety Data Sheet dated 6-8-2020, version 2

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**SECTION 1: Identification of the substance/mixture and of the company/undertaking**

**1.1. Product identifier**

Mixture identification:

Trade name: R-1234yf PAG-150

Trade code: 350-150

**1.2. Relevant identified uses of the substance or mixture and uses advised against**

Recommended use:

Automotive Air Conditioning Lubricant

**1.3. Details of the supplier of the safety data sheet**

Company:

Next Lubricants BV

Stelmakerstraat 6

9403 VB Assen

The Netherlands

+31 592 372299

Competent person responsible for the safety data sheet:

info@nextlubricants.nl

**1.4. Emergency telephone number**

National Poison Control Centre - +31 (0) 30 2748888 - Only for use by professional rescuers  
in case of emergency

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**SECTION 2: Hazards identification**

**2.1. Classification of the substance or mixture**

EC Regulation Criteria 1272/2008 (CLP)

The product is not classified as dangerous according to Regulation EC 1272/2008 (CLP).

Adverse physicochemical, human health and environmental effects:

No other hazards

**2.2. Label elements**

The product is not classified as dangerous according to Regulation EC 1272/2008 (CLP).

Hazard pictograms:

None

Hazard statements:

None

Precautionary statements:

None

Special Provisions:

None

Special provisions according to Annex XVII of REACH and subsequent amendments:

None

**2.3. Other hazards**

vPvB Substances: None - PBT Substances: None

Other Hazards:

No other hazards

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**SECTION 3: Composition/information on ingredients**

**3.1. Substances**

N.A.

**3.2. Mixtures**

Hazardous components within the meaning of the CLP regulation and related classification:

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None.

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**SECTION 4: First aid measures**

**4.1. Description of first aid measures**

In case of skin contact:

Wash with plenty of water and soap.

In case of eyes contact:

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

In case of Ingestion:

Do not under any circumstances induce vomiting. OBTAIN A MEDICAL EXAMINATION IMMEDIATELY.

In case of Inhalation:

Remove casualty to fresh air and keep warm and at rest.

**4.2. Most important symptoms and effects, both acute and delayed**

None

**4.3. Indication of any immediate medical attention and special treatment needed**

Treatment:

None

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**SECTION 5: Firefighting measures**

**5.1. Extinguishing media**

Suitable extinguishing media:

In case of fire, use a dry powder fire extinguisher to extinguish.

Extinguishing media which must not be used for safety reasons:

High Volume Water Jet

**5.2. Special hazards arising from the substance or mixture**

Do not inhale explosion and combustion gases.

Burning produces heavy smoke.

**5.3. Advice for firefighters**

Use suitable breathing apparatus .

Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

Move undamaged containers from immediate hazard area if it can be done safely.

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**SECTION 6: Accidental release measures**

**6.1. Personal precautions, protective equipment and emergency procedures**

For non emergency personnel:

Wear personal protection equipment.

Remove persons to safety.

See protective measures under section 7 and 8.

For emergency responders:

Wear personal protection equipment.

**6.2. Environmental precautions**

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.

Retain contaminated washing water and dispose it.

In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

Suitable material for taking up: absorbing material, organic, sand

**6.3. Methods and material for containment and cleaning up**

Wash with plenty of water.

**6.4. Reference to other sections**

See also section 8 and 13

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**SECTION 7: Handling and storage**

**7.1. Precautions for safe handling**

Avoid contact with skin and eyes, inhalation of vapours and mists.

Do not eat or drink while working.

See also section 8 for recommended protective equipment.

**7.2. Conditions for safe storage, including any incompatibilities**

Keep away from food, drink and feed.

Incompatible materials:

None in particular.

Instructions as regards storage premises:

Adequately ventilated premises.

**7.3. Specific end use(s)**

None in particular

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**SECTION 8: Exposure controls/personal protection**

**8.1. Control parameters**

No occupational exposure limit available

DNEL Exposure Limit Values

N.A.

PNEC Exposure Limit Values

N.A.

**8.2. Exposure controls**

Eye protection:

Not needed for normal use. Anyway, operate according good working practices.

Protection for skin:

No special precaution must be adopted for normal use.

Protection for hands:

Not needed for normal use.

Respiratory protection:

Not needed for normal use.

Thermal Hazards:

None

Environmental exposure controls:

None

Appropriate engineering controls:

None

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**SECTION 9: Physical and chemical properties**

**9.1. Information on basic physical and chemical properties**

Properties	Value	Method:	Notes
Appearance and colour:	Liquid,light yellow	--	--
Odour:		--	--
Odour threshold:	Not available	--	--
pH:	Not available	--	--
Melting point / freezing point:	Not available	--	--
Initial boiling point and boiling range:	Not available	--	--
Flash point:	226 ° C	--	--
Evaporation rate:	Not available	--	--

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Solid/gas flammability:	Not available	--	--
Upper/lower flammability or explosive limits:	Not available	--	--
Vapour pressure:	Not available	--	--
Vapour density:	Not available	--	--
Relative density:	Not available	--	--
Solubility in water:		--	--
Solubility in oil:	Not available	--	--
Partition coefficient (n-octanol/water):	Not available	--	--
Auto-ignition temperature:	Not available	--	--
Decomposition temperature:	Not available	--	--
Viscosity:	135 cSt 40°C	--	--
Explosive properties:	Not available	--	--
Oxidizing properties:	Not available	--	--

**9.2. Other information**

Properties	Value	Method:	Notes
Miscibility:	Not available	--	--
Fat Solubility:	Not available	--	--
Conductivity:	Not available	--	--
Substance Groups relevant properties	Not available	--	--

**SECTION 10: Stability and reactivity**

**10.1. Reactivity**

Stable under normal conditions

**10.2. Chemical stability**

Stable under normal conditions

**10.3. Possibility of hazardous reactions**

None

**10.4. Conditions to avoid**

Stable under normal conditions.

**10.5. Incompatible materials**

None in particular.

**10.6. Hazardous decomposition products**

None.

**SECTION 11: Toxicological information**

**11.1. Information on toxicological effects**

Toxicological information of the product:

R-1234yf PAG-150

a) acute toxicity

Not classified

Based on available data, the classification criteria are not met

b) skin corrosion/irritation

Not classified

Based on available data, the classification criteria are not met

c) serious eye damage/irritation

Not classified

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- Based on available data, the classification criteria are not met
- d) respiratory or skin sensitisation  
Not classified  
Based on available data, the classification criteria are not met
  - e) germ cell mutagenicity  
Not classified  
Based on available data, the classification criteria are not met
  - f) carcinogenicity  
Not classified  
Based on available data, the classification criteria are not met
  - g) reproductive toxicity  
Not classified  
Based on available data, the classification criteria are not met
  - h) STOT-single exposure  
Not classified  
Based on available data, the classification criteria are not met
  - i) STOT-repeated exposure  
Not classified  
Based on available data, the classification criteria are not met
  - j) aspiration hazard  
Not classified  
Based on available data, the classification criteria are not met
- Toxicological information of the main substances found in the product:  
N.A.

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**SECTION 12: Ecological information**

**12.1. Toxicity**

Adopt good working practices, so that the product is not released into the environment.

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Not classified for environmental hazards

Based on available data, the classification criteria are not met

**12.2. Persistence and degradability**

N.A.

**12.3. Bioaccumulative potential**

N.A.

**12.4. Mobility in soil**

N.A.

**12.5. Results of PBT and vPvB assessment**

vPvB Substances: None - PBT Substances: None

**12.6. Other adverse effects**

None

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**SECTION 13: Disposal considerations**

**13.1. Waste treatment methods**

Recover if possible. In so doing, comply with the local and national regulations currently in force.

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**SECTION 14: Transport information**

**14.1. UN number**

Not classified as dangerous in the meaning of transport regulations.

**14.2. UN proper shipping name**

N.A.

**14.3. Transport hazard class(es)**

N.A.

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**14.4. Packing group**

N.A.

**14.5. Environmental hazards**

N.A.

**14.6. Special precautions for user**

N.A.

**14.7. Transport in bulk according to Annex II of Marpol and the IBC Code**

N.A.

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**SECTION 15: Regulatory information**

**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

Dir. 98/24/EC (Risks related to chemical agents at work)

Dir. 2000/39/EC (Occupational exposure limit values)

Regulation (EC) n. 1907/2006 (REACH)

Regulation (EC) n. 1272/2008 (CLP)

Regulation (EC) n. 790/2009 (ATP 1 CLP) and (EU) n. 758/2013

Regulation (EU) 2015/830

Regulation (EU) n. 286/2011 (ATP 2 CLP)

Regulation (EU) n. 618/2012 (ATP 3 CLP)

Regulation (EU) n. 487/2013 (ATP 4 CLP)

Regulation (EU) n. 944/2013 (ATP 5 CLP)

Regulation (EU) n. 605/2014 (ATP 6 CLP)

Regulation (EU) n. 2015/1221 (ATP 7 CLP)

Regulation (EU) n. 2016/918 (ATP 8 CLP)

Regulation (EU) n. 2016/1179 (ATP 9 CLP)

Regulation (EU) n. 2017/776 (ATP 10 CLP)

Restrictions related to the product or the substances contained according to Annex XVII Regulation (EC) 1907/2006 (REACH) and subsequent modifications:

Restrictions related to the product:

No restriction.

Restrictions related to the substances contained:

No restriction.

Provisions related to directive EU 2012/18 (Seveso III):

Seveso III category according to Annex 1, part 1

None

Provisions related to directive EU 2012/18 (Seveso III):

N.A.

**15.2. Chemical safety assessment**

No Chemical Safety Assessment has been carried out for the mixture.

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**SECTION 16: Other information**

Paragraphs modified from the previous revision:

SECTION 1: Identification of the substance/mixture and of the company/undertaking

SECTION 9: Physical and chemical properties

SECTION 15: Regulatory information

This document was prepared by a competent person who has received appropriate training.

Main bibliographic sources:

**Safety Data Sheet**  
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ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre,  
Commission of the European Communities  
SAX's DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS - Eight Edition - Van  
Nostrand Reinold

The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality. It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.

This MSDS cancels and replaces any preceding release.

ADR:	European Agreement concerning the International Carriage of Dangerous Goods by Road.
ATE:	Acute Toxicity Estimate
ATEmix:	Acute toxicity Estimate (Mixtures)
ATP:	Adaptation to technical progress
CAS:	Chemical Abstracts Service (division of the American Chemical Society).
CLP:	Classification, Labeling, Packaging.
DNEL:	Derived No Effect Level.
EINECS:	European Inventory of Existing Commercial Chemical Substances.
GefStoffVO:	Ordinance on Hazardous Substances, Germany.
GHS:	Globally Harmonized System of Classification and Labeling of Chemicals.
IATA:	International Air Transport Association.
IATA-DGR:	Dangerous Goods Regulation by the "International Air Transport Association" (IATA).
ICAO:	International Civil Aviation Organization.
ICAO-TI:	Technical Instructions by the "International Civil Aviation Organization" (ICAO).
IMDG:	International Maritime Code for Dangerous Goods.
INCI:	International Nomenclature of Cosmetic Ingredients.
KSt:	Explosion coefficient.
LC50:	Lethal concentration, for 50 percent of test population.
LD50:	Lethal dose, for 50 percent of test population.
N.A.:	Not available
OEL:	Substance with a Union workplace exposure limit.
PBT:	Persistent, Bioaccumulative and Toxic
PNEC:	Predicted No Effect Concentration.
RID:	Regulation Concerning the International Transport of Dangerous Goods by Rail.
STEL:	Short Term Exposure limit.
STOT:	Specific Target Organ Toxicity.
TLV:	Threshold Limiting Value.
TWA:	Time-weighted average
VOC:	Volatile Organic Carbon
vPvB:	Very Persistent, Very Bioaccumulative.
WGK:	German Water Hazard Class.