

OSHA HazCom Standard 29 CFR 1910.1200(g), Rev. 2012 and GHS Rev 03.

1. Identification

Product identifier

Trade name R-1234yf AC Compressor Fluid


Product description R-1234yf AC Compressor Fluid

Details of the supplier of the safety data sheet

Manufacturer/supplier FJC AC Products
101 Commercial Dr - Mooresville, NC 28115
704-664-3587


Emergency Telephone (24 hr) INFOTRAC 1-352-323-3500 (International)
1-800-535-5053 (North America)

2. Hazard(s) Identification

Classification of the substance or mixture  GHS07

Label elements

GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS).

Hazard pictograms  GHS07

Signal word Warning

Hazard statements Harmful if swallowed.
Causes skin irritation.
Causes serious eye irritation.

2. Hazard(s) Identification (continued)

Precautionary statements

Wear protective gloves.
Wear eye protection / face protection.
Wash thoroughly after handling.
Do not eat, drink or smoke when using this product.
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.
Continue rinsing.
If swallowed: Call a poison center/doctor if you feel unwell.
Specific treatment (see on this label).
If skin irritation occurs: Get medical advice/attention.
If eye irritation persists: Get medical advice/attention.
Rinse mouth.
If on skin: Wash with plenty of water.
Take off contaminated clothing and wash it before reuse.
Dispose of contents/container in accordance with local/regional/national/international regulations.

Classification system

NFPA ratings (scale 0-4)



Health=1; Fire=1; Reactivity=0



Health=1; Fire=1; Reactivity=0


3. Composition / Information on Ingredients

Chemical characterization:

Mixtures

Dangerous Components

Polyalkylene Glycol

9003-13-8  Acute Tox. 4, H302; Skin Irrit. 2, H315;
Eye Irrit. 2A, H319

4. First-aid Measures

Description of first aid measures

General information: Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

After inhalation: In case of unconsciousness, place patient securely on side position for transportation.

After skin contact: Immediately wash with water and soap and rinse thoroughly. If irritation occurs consult a doctor.

After eye contact: Rinse opened eye for at least 15 minutes under running water. If symptoms persist, consult a doctor.

After swallowing: Immediately call a doctor.

No further relevant information available.

5. Fire-fighting Measures

Extinguishing media	
Suitable extinguishing agents	CO ₂ or Powder. Water mist to cool, no direct water spray. Collect spillage.
Special hazards arising from the substance or mixture Advice for firefighters	No further relevant information available.
Protective equipment	As in any fire, wear self-contained breathing apparatus pressure-demand (NIOSH approved or equivalent), and full protective gear to prevent contact with skin and eyes.

6. Accidental Release Measures

Personal precautions, protective equipment and emergency procedures	Not required
Environmental precautions	Do not allow to enter sewers/ surface or ground water
Methods and material for containment and cleaning up	Absorb with liquid-binding material (i.e. sand, diatomite, acid binders, universal binders, sawdust). Dispose contaminated material as waste according to section 13. Ensure adequate ventilation. Dispose of the collected material according to regulations.
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

Precautions for safe handling	Ensure good ventilation/exhaustion at the workplace. Prevent formation of aerosols.
Information about protection against and fires	No special measures required explosions
Conditions for safe storage, including any incompatibilities	
Storage	
Requirements to be met by storerooms and receptacles:	No special requirements
Further information about storage conditions	Keep receptacle tightly sealed
Specific end use(s)	No further relevant information available

8. Exposure Controls / Personal Protection

Additional information about design of technical systems Control parameters	No further data; see section 7
Components with occupational exposure limits	The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
Additional information	The lists that were valid during the creation were used as basis.
Exposure controls	
Personal protective equipment	

General protective and hygienic measures

Keep away from foodstuffs, beverages and feed. Immediately remove all soiled and contaminated clothing. Wash hands before breaks and at the end of work.
Avoid contact with the eyes and skin.

Breathing equipment

Not required

Protection of hands

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/



Protective the preparation/ the chemical mixture. Select glove material based on gloves penetration times, rates of diffusion and degradation.

Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

Penetration time of glove material

The exact break-through time has to be determined and observed by the manufacturer of the protective gloves.

Eye protection

Tightly sealed goggles

9. Physical and Chemical Properties

Information on basic physical and chemical properties

General Information

Appearance

Form

Liquid

Color

See product

Odor

Mild

Odor Threshold

Not determined

pH-value

Not determined

Change in condition

Melting point/Melting range

Not applicable

Boiling point/Boiling range

>570°F (>298°C)

Flash Point

>440°F (>227°C)

Flammability (solid, gaseous)

Not applicable

Ignition temperature

Decomposition temperature

Not determined

Auto-igniting

Not determined

Danger of explosion

Not determined

Explosion limits

Lower

Not determined

Upper

Not determined

Vapor Pressure @ 20 DEG C

<0.003 kPa

Density @ 20 DEG C

0.89-0.97

Relative Density

Not determined

Vapor Density

Not determined

Evaporation Rate	Not determined
Solubility in/Miscibility with Water	Not miscible
Partition coefficient (n-octanol/water)	Not determined
Viscosity	
Viscosity - Dynamic	Varies with grade
Viscosity - Kinematic	Varies with grade
Solvent content	
Organic solvents	0.00%
Other Information	No further information

10. Stability and Reactivity

Reactivity	No further relevant information available
Chemical stability	Stable under normal conditions
Thermal decomposition / conditions to be avoided	No decomposition if used according to specifications
Possibility of hazardous reactions	No dangerous reactions known
Conditions to avoid	No further relevant information available
Incompatible materials	No further relevant information available
Hazardous decomposition products	No dangerous decomposition products known

11. Toxicological Information

Information on toxicological effects

Acute toxicity

LD/LC50 values that are relevant for classification

9003-13-8 Polyalkylene Glycol Primary irritant effect:	Oral: LD50 >300- <2000 mg/kg (rat) Dermal: LD50 >2000 mg/kg (rat)
--	---

On the skin	Irritant to skin and mucous membranes
On the eye	Irritating effect. Causes serious eye irritation
Additional toxicological information	The product shows the following dangers according to internally approved calculation methods for preparations: Harmful. Irritant.
Carcinogenic categories	
IARC (International Agency for Research on Cancer)	None of the ingredients are listed. Group 1 - Carcinogenic to humans Group 2A - Probably carcinogenic to humans Group 2B - Possibly carcinogenic to humans Group 3 - Not classifiable as to its carcinogenicity to humans Group 4 - Probably not carcinogenic to humans
NTP (National Toxicology Program)	None of the ingredients are listed
OSHA-Ca (Occupational Safety & Health Administration)	None of the ingredients are listed

12. Ecological Information

Toxicity	No data is available on this product.
Aquatic toxicity	No further relevant information available
Persistence and degradability	No further relevant information available
Bioaccumulative potential	No further relevant information available
Mobility in soil	No further relevant information available
Additional ecological information	
General notes	Water hazard class 1 (Self-assessment): slightly hazardous for water

13. Disposal Considerations

Uncleaned packaging	Disposal must be made according to official regulations
---------------------	---

14. Transportation Information

UN-Number		
• DOT, ADR, ADN, IMDG, IATA	Non-regulated material	
• UN proper shipping name		
• DOT, ADR, ADN, IMDG, IATA	Non-regulated material	
• Transport hazard class(es)		
• DOT, ADR, ADN, IMDG, IATA		
• Class	Non-regulated material	
• Packing group		
• DOT, ADR, IMDG, IATA	Non-regulated material	
• Environmental hazards		
• Marine pollutant	No	
• Special precautions for user	Not applicable	
• Transport in bulk according to Annex II Not applicable of MARPOL73/78 and the IBC Code		
• UN "Model Regulation"	—	

15. Regulatory Information

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

Section 355 (extremely: None of the ingredients are listed hazardous substances)

Section 313 (Specific toxic: None of the ingredients are listed chemical listings)

TSCA (Toxic Substances Control Act) 68515-49-1: Diisodecyl Phthalate Proposition 65

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 68515-49-1: Diisodecyl Phthalate

Carcinogenic categories

EPA (Environmental Protection Agency) None of the ingredients are listed

TLV (Threshold Limit Value established by ACGIH) None of the ingredients are listed

NIOSH-Ca (National Institute for Occupational Safety and Health) None of the ingredients are listed

GHS label elements Non-regulated material

Hazard pictograms




GHS07

Signal word Warning

Hazard-determining components of labeling Polyalkylene Glycol

Hazard statements Harmful if swallowed. Causes skin irritation. Causes serious eye irritation.

Precautionary statements	<p>Wear protective gloves.</p> <p>Wear eye protection / face protection.</p> <p>Wash thoroughly after handling.</p> <p>Do not eat, drink or smoke when using this product.</p> <p>If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.</p> <p>Continue rinsing.</p> <p>If swallowed: Call a poison center/doctor if you feel unwell.</p> <p>Specific treatment (see on this label).</p> <p>If skin irritation occurs: Get medical advice/attention.</p> <p>If eye irritation persists: Get medical advice/attention.</p> <p>Rinse mouth.</p> <p>If on skin: Wash with plenty of water.</p> <p>Take off contaminated clothing and wash it before reuse.</p> <p>Dispose of contents/container in accordance with local/regional/national/international regulations.</p>
National regulations	The product is subject to be labeled according with the prevailing version of the regulations on hazardous substances.
State Right to Know	<p>Polyalkylene Glycol</p> <p>9003-13-8 ute Tox. 4, H302; Skin Irrit. 2, H315;</p> <p>Eye Irrit. 2A, H319</p>
Chemical safety assessment	A chemical safety assessment has not been carried out

16. Other Information

The information and recommendations in this safety data sheet are, to the best of our knowledge, accurate as of the date of issue. Nothing herein shall be deemed to create warranty, expressed or implied and shall not establish a legally valid contractual relationship. It is the responsibility of the user to determine applicability of this information and the suitability of the material or product for any particular purpose.

Date of preparation	02/19/2016 / 1
Date of Revision	03-Jan-2023

Abbreviations and acronyms

ADR: Accord européen sur le transport des marchandises dangereuses par Route
(European Agreement concerning the International Carriage of Dangerous Goods by Road)
ADN: The European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
IMDG: International Maritime Code for Dangerous Goods
DOT: US Department of Transportation
IATA: International Air Transport Association
ACGIH: American Conference of Governmental Industrial Hygienists
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
NFPA: National Fire Protection Association (USA)
HMIS: Hazardous Materials Identification System (USA)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
Acute Tox. 4: Acute toxicity, Hazard Category 4
Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2
Eye Irrit. 2A: Serious eye damage/eye irritation, Hazard Category 2A