

Registered office: Pirojshanagar, Eastern Express Highway, Vikhroli, Mumbai 400 079, India.

Phone: (91-22) 2518 8010 / 2518 8020 / 2518 8030 extn: 4768 Fax: (91-22) 2518 8096 / 2518 8068

Printing date 08/05/2015

e-mail: rv.dubhashi@godrejinds.com

Reviewed on 05/05/2015

1 Identification

· **Trade name:** ERUCIC ACID

· **CAS Number:**

112-86-7

· **EC number:**

204-011-3

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

No further relevant information available.

· **Application of the substance / the mixture**

• Used as lubricant additive; chemical intermediate for eurcamide, stearyleurcamide & dibasic acids; polyethylene film additive; water resistant nylon additive.

• Used in paints, lacquers and varnishes industry, polymer industry, textile processing industry.

• Used as cooling agents for metal processing.

• Used as cutting fluids.

· **Details of the supplier of the safety data sheet**

· **Manufacturer/Supplier:**

Godrej Industries Limited,
Eastern Express Highway,
Vikhroli (east), Mumbai,
India. Pin - 400 079

· **Information department:**

Telephone:91-22-25188010 / 20 / 30

Fax No.:91-22-251880 96 / 68

e-mail:ar.singh@godrejinds.com

· **Emergency telephone number:**

Contact details of US importer:

Emergency telephone number: Kindly provide emergency telephone number to finalise the SDS

Telephone number of US importer:

Opening hours:

Other Comments (e.g. language(s) of the phone service): English

2 Hazard(s) identification

· **Classification of the substance or mixture**



GHS07

Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2A H319 Causes serious eye irritation.

· **Label elements**

· **GHS label elements**

The substance is classified and labeled according to the Globally Harmonized System (GHS).

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· **Hazard pictograms**



GHS07

· **Signal word** Warning

· **Hazard statements**

Causes skin irritation.

Causes serious eye irritation.

· **Precautionary statements**

Wear protective gloves.

Wear eye protection / face protection.

Wash thoroughly after handling.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Specific treatment (see on this label).

If skin irritation occurs: Get medical advice/attention.

If eye irritation persists: Get medical advice/attention.

If on skin: Wash with plenty of water.

Take off contaminated clothing and wash it before reuse.

· **Additional information:**

S26 In case of contact with eyes rinse immediately with plenty of water and seek medical advice

S36 Wear suitable protective clothing

· **Classification system:**

· **NFPA ratings (scale 0 - 4)**



Health = 1

Fire = 0

Reactivity = 0

· **HMIS-ratings (scale 0 - 4)**



Health = 1

Fire = 0

Reactivity = 0

· **Other hazards**

· **Results of PBT and vPvB assessment**

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

3 Composition/information on ingredients

· **Chemical characterization: Substances**

· **CAS No. Description**

112-86-7 (Z)-docos-13-enoic acid

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- **Identification number(s)**
- **EC number:** 204-011-3
- **Additional information:**
Synonyms: Prifac 2990, cis-13-Docosenoic acid
Molecular Formula: C₂₂H₄₂O₂
Molecular weight: 338,57 g/mol

4 First-aid measures

- **Description of first aid measures**
- **General information:**
Consult a physician. Show this safety data sheet to the doctor in attendance.
- **After inhalation:**
If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
- **After skin contact:** Wash off with soap and plenty of water. Consult a physician.
- **After eye contact:**
Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
- **After swallowing:**
Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.
- **Information for doctor:** Treat symptomatically.
- **Most important symptoms and effects, both acute and delayed**
No further relevant information available.
- **Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:**
Use water spray, Carbon Dioxide, Dry Chemical or Alcohol Foam.
- **For safety reasons unsuitable extinguishing agents:** None.
- **Special hazards arising from the substance or mixture** Carbon oxides
- **Advice for firefighters** Wear self-contained breathing apparatus for firefighting if necessary.
- **Protective equipment:** Wear self-contained respiratory protective device.
- **Additional information**
Forms slippery soap when in contact with alkali. Use of safety shoes recommended.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**

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Use personal protective equipment.

Avoid breathing vapours, mist or gas.

Ensure adequate ventilation.

Evacuate personnel to safe areas.

• **Environmental precautions:** *Do not allow to enter sewers/ surface or ground water.*

• **Methods and material for containment and cleaning up:**

Sweep up and shovel. Keep in suitable, closed containers for disposal.

• **Reference to other sections**

Refer to section 8 and 13 for additional information on personal protection equipment and disposal methods.

7 Handling and storage

• **Handling:**

• **Precautions for safe handling** *Avoid contact with skin and eyes. Provide appropriate exhaust ventilation.*

• **Information about protection against explosions and fires:**
No special measures required.

• **Conditions for safe storage, including any incompatibilities**
Not specific measures required

• **Storage:**

• **Requirements to be met by storerooms and receptacles:**
Keep container tightly closed in a dry and well-ventilated place.

• **Information about storage in one common storage facility:**
Store away from incompatibles.

• **Further information about storage conditions:**
Store in cool place.

Recommended storage temperature 2 - 8 °C

Store under inert gas. Air sensitive.

• **Storage class:** *Storage class (TRGS 510): Non Combustible Solids*

• **Specific end use(s)**

• *Used as lubricant additive; chemical intermediate for eurcamide, stearyleurcamide & dibasic acids; polyethylene film additive; water resistant nylon additive.*

• *Used in paints, lacquers and varnishes industry, polymer industry, textile processing industry.*

• *Used as cooling agents for metal processing.*

• *Used as cutting fluids.*

8 Exposure controls/personal protection

• **Control parameters**

• **Components with limit values that require monitoring at the workplace:**

The substance does not have critical values that have to be monitored at the workplace.

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· **Additional Occupational Exposure Limit Values for possible hazards during processing:**

ACGIH TLV : Not Applicable

OSHA PEL : Not Applicable

· **Exposure controls**

· **Personal protective equipment:**

· **General protective and hygienic measures:**

The usual precautionary measures for handling chemicals should be followed.

· **Breathing equipment:** Suitable respiratory protective device recommended.

· **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/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the 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.

· **Penetration time of glove material**

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

· **Eye protection:**



Tightly sealed goggles

· **Body protection:**

Impervious clothing, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

9 Physical and chemical properties

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

· **General Information**

Appearance:

Liquid

· **Form:**

Liquid at temp. > 35 C

· **Color:**

Pale Yellow

· **Odor:**

Slight characteristic Odour

· **pH-value:**

Not available

· **Change in condition**

Melting point/Melting range:

30 - 33 °C (86 - 91 °F)

Boiling point/Boiling range:

281 °C (538 °F) (at 30 mm)

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· Flash point:	> 200 °C (> 392 °F)
· Flammability (solid, gaseous):	Product is not flammable.
· Auto igniting:	Product is not selfigniting.
· Danger of explosion:	Product does not present an explosion hazard.
· Vapor pressure at 30 °C (86 °F):	< 1 mm
· Density at 70 °C (158 °F):	0.8532 g/cm ³ (7.12 lbs/gal)
· Vapour density	>1 g/cm ³ (>8.345 lbs/gal)
· Solubility in / Miscibility with Water:	Insoluble.
· Partition coefficient (n-octanol/water):	9.69 log KOW
· Viscosity:	
Dynamic:	Not available
· Other information	No further relevant information available.

10 Stability and reactivity

- **Reactivity** No further relevant information available.
- **Chemical stability** Product is very stable under the prescribed storage 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:** Strong Oxidising agents.
- **Hazardous decomposition products:**
Acrid smoke and irritating fumes of Carbon Oxides when when heated BP.
- **Additional information:** Not available

11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**

- **LD/LC50 values that are relevant for classification:**

Oral	LD50	> 5000 mg/kg bw (rat) (OECD Guide-line 401)
		>19431.7 mg/kg (rat)
Dermal	LD50	> 3000 mg/kg bw (Guinea pig)

- **Primary irritant effect:**

- **On the skin:**

Species: rabbit

Method: OECD Guideline 404 "Acute Dermal Irritation/Corrosion"

Summary of the symptoms: Slight to weak erythema and edema of all experimental animals

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were observed during the first 72 hours after exposure. Besides, one animal showed a brownish discoloration of the skin. The irritation effects persisted longer than 21 days, additionally eschar was observed.

Result: Moderately irritating.

· **On the eye:**

Species: rabbit

Exposure period: 72 hours

Summary of the symptoms: Material produced mild conjunctivitis clearing completely in 72 hours

Result: slightly irritating.

· **Sensitization:** No sensitizing effects known.

· **Sub acute to chronic toxicity:**

Regarding repeated dose, genetic, developmental and repro study no subacute and chronic toxicity was observed.

· **Additional toxicological information:**

When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

The substance is not subject to classification.

· **Carcinogenic categories**

· **IARC (International Agency for Research on Cancer)** Substance is not listed.

· **NTP (National Toxicology Program)** Substance is not listed.

· **OSHA-Ca (Occupational Safety & Health Administration)** Substance is not listed.

12 Ecological information

· **Toxicity**

· **Aquatic toxicity:**

LC50 (96 hrs.) (Static)	710 mg/L (Brachydanio rerio (Zebra barbel))
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· **Persistence and degradability**

Biodegradation in water: Half

life=15 days (Predicted)

Result: Readily biodegradable

· **Other information:** The product is easily biodegradable.

· **Behavior in environmental systems:**

· **Bioaccumulative potential**

Value of BCF: 3.2

Interpretation of result: The substance is non bioaccumulative.

· **Mobility in soil:** Soil Adsorption Coefficient: 130000

· **Additional ecological information:**

· **General notes:**

Generally not hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

· **Results of PBT and vPvB assessment** To be provided after the REACH registration.

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

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- **Other adverse effects** No further relevant information available.

13 Disposal considerations

- **Waste treatment methods**

Offer surplus and non-recyclable solutions to a licensed disposal company.

Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

- **Recommendation:** Sweep up and store in closed container.

- **Waste disposal key:**

Waste must be disposed of in accordance with federal, state and local environmental control regulations.

- **Uncleaned packagings:**

- **Recommendation:** Disposal must be made according to official regulations.

- **Recommended cleansing agent:** Not available

14 Transport information

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

15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Sara**
- **Section 355 (extremely hazardous substances):** Substance is not listed.

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- **Section 313 (Specific toxic chemical listings):** Substance is not listed.
- **TSCA (Toxic Substances Control Act):** Substance is listed.

- **Proposition 65**
- **Chemicals known to cause cancer:** Substance is not listed.
- **Chemicals known to cause reproductive toxicity for females:** Substance is not listed.
- **Chemicals known to cause reproductive toxicity for males:** Substance is not listed.
- **Chemicals known to cause developmental toxicity:** Substance is not listed.

- **Carcinogenic categories**
- **EPA (Environmental Protection Agency)** Substance is not listed.
- **TLV (Threshold Limit Value established by ACGIH)** Substance is not listed.
- **NIOSH-Ca (National Institute for Occupational Safety and Health)**
Substance is not listed.
- **GHS label elements**
The substance is classified and labeled according to the Globally Harmonized System (GHS).
- **Hazard pictograms**



GHS07

- **Signal word** Warning
- **Hazard statements**
Causes skin irritation.
Causes serious eye irritation.
- **Precautionary statements**
Wear protective gloves.
Wear eye protection / face protection.
Wash thoroughly after handling.
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Specific treatment (see on this label).
If skin irritation occurs: Get medical advice/attention.
If eye irritation persists: Get medical advice/attention.
If on skin: Wash with plenty of water.
Take off contaminated clothing and wash it before reuse.
- **National regulations:**
- **Other regulations, limitations and prohibitive regulations**
User to follow national laws and regulations.

- **Chemical safety assessment:**
Not applicable.

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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.

• **Department issuing SDS:** Product safety department.

• **Contact:**

Telephone: 91-22-25188010 / 20 / 30

Fax No.: 91-22-251880 96 / 68

E-mail: ar.singh@godrejinds.com

• **Date of preparation / last revision** 08/05/2015 / -

• **Abbreviations and acronyms:**

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

ADR: Accord européen sur le transport des marchandises dangereuses par Route (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

ACGIH: American Conference of Governmental Industrial Hygienists EINECS:

European Inventory of Existing Commercial 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

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2

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

• **Sources**

• Occupational Safety & Health Administration (OSHA)

<https://www.osha.gov/Publications/OSHA3514.html> <<https://www.osha.gov/Publications/OSHA3514.html>>

HSDB:

<http://toxnet.nlm.nih.gov/cgi-bin/sis/search2/f?./temp/~VwvxKo:3>

EXPUB:

<http://www.expub.com/Members/chemexpertSearchResults.aspx>

IUCLID:

<http://www.expub.com/Members/>

[DocumentViewer.aspx?key=6020547&pc=172281D091B640f39AAA7AD75B2E04C6&st=RTECS](http://www.expub.com/Members/DocumentViewer.aspx?key=6020547&pc=172281D091B640f39AAA7AD75B2E04C6&st=RTECS)

[http://www.expub.com/Members/](http://www.expub.com/Members/DocumentViewer.aspx?key=6746858&pc=172281D091B640f39AAA7AD75B2E04C6&st=SIGMAALDRICH)

[DocumentViewer.aspx?key=6746858&pc=172281D091B640f39AAA7AD75B2E04C6&st=SIGMAALDRICH](http://www.expub.com/Members/DocumentViewer.aspx?key=6746858&pc=172281D091B640f39AAA7AD75B2E04C6&st=SIGMAALDRICH)

<http://www.sigmaaldrich.com/MSDS/MSDS>

[DisplayMSDSPage.do?country=IN&language=en&productNumber=45629&brand=FLUKA&PageToGoToURL=http%3A%2F%2F](http://www.sigmaaldrich.com/MSDS/MSDS/DisplayMSDSPage.do?country=IN&language=en&productNumber=45629&brand=FLUKA&PageToGoToURL=http%3A%2F%2F)

[%3D112-86-](http://www.sigmaaldrich.com/MSDS/MSDS/DisplayMSDSPage.do?country=IN&language=en&productNumber=45629&brand=FLUKA&PageToGoToURL=http%3A%2F%2F)

[7%26interface%3DCAS%2520No.%26N%3D0%2B%26mode%3Dpartialmax%26lang%3De](http://www.sigmaaldrich.com/MSDS/MSDS/DisplayMSDSPage.do?country=IN&language=en&productNumber=45629&brand=FLUKA&PageToGoToURL=http%3A%2F%2F)

[n%26region%3DIN%26focus%3Dproduct](http://www.sigmaaldrich.com/MSDS/MSDS/DisplayMSDSPage.do?country=IN&language=en&productNumber=45629&brand=FLUKA&PageToGoToURL=http%3A%2F%2F)

[CHEMSPIDER](http://www.sigmaaldrich.com/MSDS/MSDS/DisplayMSDSPage.do?country=IN&language=en&productNumber=45629&brand=FLUKA&PageToGoToURL=http%3A%2F%2F)

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<http://www.chemspider.com/Chemical-Structure.4444561.html?rid=c01b1809-e75a-4c92-a9bd-ac694eef3a30>

*** Data compared to the previous version altered.**

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

Section 3: Composition/information of ingredients

Section 4: First-aid measures.

Section 5: Fire-fighting measures

Section 6: Accidental Release measures

Section 7: Handling and storage.

Section 8: Exposure Controls/Personal protection.

Section 9: Physical and Chemical properties.

Section 10: Stability and Reactivity.

Section 11: Toxicological Information.

Section 12: Ecological Information.

Section 13: Disposal consideration

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