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

Phone: (91-22) 2518 8010 / 2518 8020 / 2518 8030 extn: 4768 Fax: (91-22) 2518 8063 / 2518 8065

Rev. 02

e-mail: rv.dubhashi@godrejinds.com

Effective Date 01/04/2019

1 Identification

· Trade name: Ginol 18 (95 %) (Stearyl Alcohol) (Octadecan 1 - Ol)

Chemical Name-Octadecan-1-ol

· CAS Number:

112-92-5

· EC number:

204-017-6

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

No further relevant information available.

· Application of the substance / the mixture

1) Synthetic intermediate

Coatings

Metalworking fluids/rolling oils

Mining/offshore - Mining chemicals

Process chemical e.g. in Paper and Textiles industries

2) Personal care

Use in cleaning agents

3) Other consumer uses (pharmaceuticals and personal care)

Plaster/cement - Use as binders and release agents / Road and construction applications

Plastic/rubber - Polymer processing

4) Agrochemicals

· Details of the supplier of the safety data sheet

· Manufacturer/Supplier:

Godrej Industries Limited,

Plot No 3, Village Kanerao,

Taluka Valia, District Bharuch, Gujarat, India.

Pin: 393135

Telephone:02643 270756 / 57 / 58 / 59 / 60

Fax:91-2643 270018

· Information department:

Mr RV Dubhashi, Email: rv.dubhashi@godrejinds.com

Tel No.: 022-25194768

Telephone number of EU importer:

Opening hours: (08.30 –17.00 hours GMT +5.5 hours) Other Comments Other Comments (e.g. language(s) of the phone service): English

2 Hazard(s) identification

· Classification of the substance or mixture

The substance is not classified according to the Globally Harmonized System (GHS).

- · Classification according to Directive 67/548/EEC or Directive 1999/45/EC Not applicable.
- · Information concerning particular hazards for human and environment: Not applicable.
- · Label elements
- · Labelling according to EU guidelines:

The substance is not subject to classification according to the sources of literature known to us. Observe the general safety regulations when handling chemicals.

- · Safety phrases: Not applicable
- · Classification system:
- · NFPA ratings (scale 0 4)



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· HMIS-ratings (scale 0 - 4)



Health = 0 Fire = 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

112-92-5 octadecan-1-ol

- · Identification number(s)
- · EC number: 204-017-6
- · Additonal information:

Molecular Formula:C18H38O Molecular Weight: 270.497

· Composition -Stearyl alcohol min. 95%

4 First-aid measures

- · Description of first aid measures
- · General information:

Seek immediate medical advice.

No hazards which require special first aid measures

· After inhalation:

Take affected person into the open air and allow him to rest.

Remove from exposure, lie down. If breathing is irregular or stopped, administer artificial respiration.

Monitor breathing, give oxygen if necessary.

Consult a physician

- · After skin contact: Wash with plenty of soap and water
- · After eye contact: Wash eyes with plenty of water for at least 15 minutes
- · After swallowing:

Wash the affected person's mouth with plenty of water, provided he is conscious.

Consult a physician. Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person.

- · 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: Water spray, Dry powder, Foam, Carbon dioxide (CO2)
- · Special hazards arising from the substance or mixture No further relevant information available.
- · Advice for firefiahters

Wear breathing apparatus and fully protective clothing to prevent contact with skin and eyes.

· Protective equipment: Wear self contained breathing apparatus for fire fighting if necessary.

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· Additional information

Ensure adequate ventilation. Remove all sources of ignition. Use personal protective equipment.

6 Accidental release measures

· Personal precautions, protective equipment and emergency procedures

Wear respirator, chemical safety goggles, rubber boots and heavy rubber gloves

- · Environmental precautions: Do not allow product into drain or water course.
- · Methods and material for containment and cleaning up:

Sweep up, place in a bag and hold for waste disposal. Avoid raising dust. Ventilate area and wash spill site after material pickup is complete. Use mechanical handling equipment.

· 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

Handle in accordance with good hygiene and safety procedures.

Do not breathe dust, and avoid contact with eyes, skin and clothing.

Avoid prolonged or repeated exposure and wash thoroughly after handling.

Do not leave container open.

Use leak-proof equipment with exhaust for refilling or transfer.

Avoid spillage.

Fill only into clearly marked containers.

Avoid rising dust

· Information about protection against explosions and fires:

Keep away from sources of ignition (e.g. open flames, heat sources and sparks).

· Conditions for safe storage, including any incompatibilities

Do not use any food containers - risk of mistake.

Containers have to be marked clearly and permanently.

Keep container tightly closed.

Recommended storage at room

temperature. Store in a dry place

- · Storage: Ambient condition
- · Requirements to be met by storerooms and receptacles:

Suitable storage material: SS tank / Laquor-lined MS drums / HDPE-laminated bags with liners/ nylon bags

· Information about storage in one common storage facility:

Keep container closed and store in a cool, dry place

- · Further information about storage conditions: None.
- · Specific end use(s)

1) Synthetic intermediate

Coatings

Metalworking fluids/rolling oils

Mining/offshore - Mining chemicals

Process chemical e.g. in Paper and Textiles industries

2) Personal care

Use in cleaning agents

3) Other consumer uses (pharmaceuticals and personal care)

Plaster/cement - Use as binders and release agents / Road and construction applications

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8 Exposure controls/personal protection

· Control parameters

Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

Use process enclosure, local exhaust ventilation, or other engineering controls to control airborne levels. Personal Protective Equipment.

- · Components with limit values that require monitoring at the workplace: Not required.
- · Exposure controls
- · Personal protective equipment:
- · General protective and hygienic measures:

The usual precautionary measures for handling chemicals should be followed.

· Breathing equipment:

Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as (National Institute for Occupational Safety and Health)NIOSH (US) or CEN (EU).

· Protection of hands:



Protective gloves

· Material of gloves

Polychloroprene - CR (0,5 mm)

Nitrile rubber/Nitrile latex - NBR (0,35 mm)

Butyl rubber - Butyl (0,5 mm)

Fluoro carbon rubber - FKM (0,4 mm)

Polyvinyl chloride - PVC (0,5 mm)

· 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: Use protective suit.

9 Physical and chemical properties · Information on basic physical and chemical properties · General Information · Appearance: Form: White flakes and pastilles(clear liquid when melted) Color: White Odor: typical · Change in condition Melting point/Melting range: 56-60 ℃ **Boiling point/Boiling range:** >**249** ℃ 173 °C · Flash point: · Flammability (solid, gaseous): Product is not flammable. 250 °C (482 °F) · Ignition temperature: · Auto igniting: Product is not selfigniting.

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Danger of explosion:	Product does not present an explosion hazard.	
Explosion limits:		
Lower:	1 Vol %	
Upper:	8 Vol %	
Vapor pressure at 38 °C (100 °F):	<0.01 mm Hg (38 °C)	
Density):	812 kg/m³	
Solubility in / Miscibility with		
Water at 22 °C (72 °F):	<1 mg/l (pH 5.5)	
Partition coefficient (n-octanol/wat	er): 7.4 log POW	
Viscosity:		
Dynamic at 100 °C (212 °F):	4.006 mm²/s	
Other information	No further relevant information available.	

10 Stability and reactivity

- · Reactivity
- · Chemical stability
- · Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · Possibility of hazardous reactions No dangerous reactions known.
- · Conditions to avoid: Avoid contact with incompatible materials
- \cdot Incompatible materials: Strong acids and Oxidizing agents.
- · Hazardous decomposition products: Carbon monoxide and Carbon-di-oxide.

11 Toxicological information

- · Information on toxicological effects
- · Acute toxicity:

· LD/LC50	· LD/LC50 values that are relevant for classification:		
Oral	LD50	> 5000 mg/Kg (rat(Sprague-Dawley)male/female)	
Dermal	LD 50	8000 mg/kg bw (Rabbit (New Zealand White) male/female) (RA CAS No. 112-72-1)	

- · Primary irritant effect:
- · on the skin: No irritant effect.
- · on the eye: No irritating effect.
- · Sensitization: Not sensitising
- · Other information (about experimental toxicology):

Repeated dose toxicity (OECD Guideline 407 (Repeated Dose 28-Day Oral Toxicity in Rodents)

Species/Strain: rat/Sprague-Dawley

Sex: male/female

Route of administration: oral: gavage Duration of treatment / exposure: 28 days Doses/Concentrations: 0, 100, 500, 1000 mg/kg in olive oil Endpoint: NOAEL Effect level: 1000 mg/kg bw/day (nominal)

Sex: male/female

Result: These effects are not considered of toxicological significance.

· Sub acute to chronic toxicity:

Toxicity to reproduction Species/Strain: rat/ Wistar Route of administration: Oral

Doses / concentrations:0, 1500, 7500 or 30,000 ppm (ca 0, 100, 500, 2000

mg/kg/bw/day) Endpoint :NOAEL

Generation: P

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Trade name: Ginol 18 (95 %) (Stearyl Alcohol) (Octadecan 1 - Ol)

Sex: male/female

Effect level: 2000 mg/kg bw/day (nominal)

Result: Non toxic

· 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:		
EC50(48-h)	1000 mg/L (Aquatic invertebrate)	
	1700 mg/L (Aquatic invertebrate)	
EL50(96-h)	> 10 mg/L (Aquatic bacteria)	
LC50(96-h)	10000 mg/L (Fish)	
NOEC(21-d)	0.98 mg/L (Aquatic invertebrate)	

- · Persistence and degradability the substance is readily biodegradable in water.
- · Bio accumulative potential

Bioaccumulation factor (Predicted)

value: 1,500

Result: The substance is non-bio accumulative

- · Mobility in soil: Soil Adsorbtion Coefficient: 15000 (Estimated)
- $\cdot \textit{Additional ecological information:}$
- · General notes: Generally not hazardous for water
- · Results of PBT and vPvB assessment
- · PBT: Not applicable.
- · vPvB: Not vPvB
- $\cdot \textit{Other adverse effects No further relevant information available}.$

13 Disposal considerations

- · Waste treatment methods
- · Recommendation:

The product should not get into any kind of water without treatment. Dissolved in water, the material is easily biodegradable (90%) and will not cause any disturbance in wastewater-treatment plants. Due to its low solubility in water, larger amounts need to be eliminated by separators, such as those used for fats and oils. For paper production and textiles it is recommended that waste release from site be limited to 0.98 and 5 kg/day, respectively if on site biological treatment is not available.

- · Waste disposal key: Can be incinerated, when in compliance with local regulations.
- · Uncleaned packagings:
- Recommendation:

Disposal of small amounts of waste material to be done in accordance with federal, state and local environmental regulations.

Larger amounts should be collected as described in section 6 and used for recycling crude raw materials

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UN-Number	
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.

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.
- · 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.
- · Product related hazard information:

The substance is not subject to classification according to the sources of literature known to us. Observe the general safety regulations when handling chemicals.

- · National regulations:
- · Other regulations, limitations and prohibitive regulations

US-TSCA - Listed

Japan MITI - Listed

New Zealand (NZioC) - Listed

Australian Inventory of Chemical Substances (AICS) - Listed

Philippine Inventory of Chemicals and Chemical Substances (PICCS) - Listed

China (IECSC) - Listed

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16 Other information

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

- · Department issuing SDS: Product safety department.
- · Contact: Mr. RV Dubhashi

Akshay Bhavsar

Tel no. 022-25194768

Email: rv.dubhashi@godrejinds.com,

ap.bhavsar@godrejinds.com

· Date of last revision 01/04/2019

· 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) ICAO: International Civil

Aviation Organisation

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

· Sources

Occupational Safety & Health Administration (OSHA)

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

ECHA-registered substances

http://apps.echa.europa.eu/registered/data/dossiers/DISS-9c7e368e-0303-556e-e044-

00144f67d249/AGGRbcc55acc-

b1db-4f9a-b999-6a91379f9bd9 DISS-9c7e368e-0303-556e-e044-00144f67d249.htmlL-45fa8d15-

794f-4598-83a1-c0b761e1c2b9

PBT profiler

http://www.pbtprofiler.net/Results.as

· * Data compared to the previous version altered.

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

Section 2: Hazard identification

Section 3: Composition /Information on 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 Considerations

Section 15 - Regulatory Information

Section 16 - Other information