



Safety data sheet
COMMISSION REGULATION (EU) No 453/2010 of 20 May 2010
amending Regulation (EC) No 1907/2006

VVF(INDIA)LIMITED

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

- **1.1 Trade name:** Fatty acids, C8-10
- **CAS Number:**
68937-75-7
- **EC number:**
273-086-2
- **Registration number** 01-2119555294-36-0008
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**
- **Sector of Use**
SU 0: Other: SU 3 Industrial Manufacturing (all), SU 22 Public domain (administration, education, entertainment, services, craftsmen)
SU5 M a n u f a c t u r e of textiles, leather, fur
SU10 Formulation [mixing] of preparations and/or re-packaging (excluding alloys)
SU23 Electricity, steam, gas water supply and sewage treatment
- **Product category**
PC9a Coatings and paints, thinners, paint removers
PC9b Fillers, putties, plasters, modelling clay
PC9c Finger paints
PC14 Metal surface treatment products, including galvanic and electroplating products
PC18 Ink and toners
PC20 Products such as ph-regulators, flocculants, precipitants, neutralization agents
PC21 Laboratory chemicals
PC23 Leather tanning, dye, finishing, impregnation and care products
PC24 Lubricants, greases, release products
PC25 Metal working fluids
PC31 Polishes and wax blends
PC32 Polymer preparations and compounds
PC34 Textile dyes, finishing and impregnating products; including bleaches and other processing aids
PC35 Washing and cleaning products (including solvent based products)
PC37 Water treatment chemicals
PC39 Cosmetics, personal care products
- **Process category**
PROC1 Use in closed process, no likelihood of exposure
PROC2 Use in closed, continuous process with occasional controlled exposure
PROC3 Use in closed batch process (synthesis or formulation)
PROC4 Use in batch and other process (synthesis) where opportunity for exposure arises
PROC5 Mixing or blending in batch processes for formulation of preparations and articles (multistage and/or significant contact)
PROC7 Industrial spraying
PROC8a Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities
PROC8b Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities
PROC9 Transfer of substance or preparation into small containers (dedicated filling line, including weighing)
PROC10 Roller application or brushing
PROC11 Non industrial spraying
PROC13 Treatment of articles by dipping and pouring
PROC14 Production of preparations or articles by tableting, compression, extrusion, pelletisation
PROC15 Use as laboratory reagent
PROC17 Lubrication at high energy conditions and in partly open process
PROC19 Hand-mixing with intimate contact and only PPE available
PROC21 Low energy manipulation of substances bound in materials and/or articles
- **Environmental release category**
ERC1 Manufacture of substances
ERC2 Formulation of preparations

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ERC3 *Formulation in materials*ERC4 *Industrial use of processing aids in processes and products, not becoming part of articles*ERC5 *Industrial use resulting in inclusion into or onto a matrix*ERC6b *Industrial use of reactive processing aids*ERC6d *Industrial use of process regulators for polymerisation processes in production of resins, rubbers, polymers.*ERC8a *Wide dispersive indoor use of processing aids in open systems* ERC8b *Wide dispersive indoor use of reactive substances in open systems* ERC8d *Wide dispersive outdoor use of processing aids in open systems*ERC10a *Wide dispersive outdoor use of long-life articles and materials with low release*ERC11a *Wide dispersive indoor use of long-life articles and materials with low release*

- **Application of the substance / the mixture**

Used in various end-use applications running the gamut of possibilities including Personal Care items like bar soaps, and Household items like fabric softeners, to Industrial Applications including lubricants, metal soaps and numerous intermediate chemicals.

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

- **Manufacturer/Supplier:**

VVF (INDIA) LIMITED

Reg. Office: 109,

Sion (E) Mumbai,

India -400022

Telephone : +91 22 40282000

Email ID: oleochemical@vvltd.com

- **Further information obtainable from:**

- **Contact person** Mr. C.R. Marathe

- Telephone: +91 22 3921 3900

- Fax: +91 22 2741 2173

- Email ID: cr.marathe@vvltd.com

SECTION 2: Hazards identification

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

- **Classification according to Regulation (EC) No 1272/2008**



Corrosion

Skin Corr. 1B H314 Causes severe skin burns and eye damage.

- **Classification according to Directive 67/548/EEC or Directive 1999/45/EC**



C; Corrosive

R34: Causes burns.

- **Information concerning particular hazards for human and environment: Not applicable.**

- **2.2 Label elements**

- **Labelling according to Regulation (EC) No 1272/2008**

The substance is classified and labelled according to the CLP regulation.

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· Hazard pictograms



GHS05

· Signal word *Danger*

· Hazard statements

H314 Causes severe skin burns and eye damage.

· Precautionary statements

P260 Do not breathe dust/fume/gas/mist/vapours/spray.

P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310 Immediately call a POISON CENTER or doctor/physician.

P405 Store locked up.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

· 2.3 Other hazards

· Results of PBT and vPvB assessment

· PBT: Not applicable.

· vPvB: Not applicable.

SECTION 3: Composition/information on ingredients

· 3.1 Chemical characterization: Substances

· CAS No. Description

68937-75-7 Fatty acids, C8-10

· Identification number(s)

· EC number: 273-086-2

SECTION 4: First aid measures

· 4.1 Description of first aid measures

· After inhalation: Supply fresh air, Consult doctor in case of complaints.

· After skin contact: Remove contaminated clothing, wash skin with soap and water, consult a doctor if necessary.

· After eye contact: Rinse opened eye for several minutes under running water. Then consult a doctor.

· After swallowing:

Do not give anything by mouth to an unconscious person. Do not induce vomiting. Seek medical attention.

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

Symptoms/injuries after eye contact Irritation of the eye tissue

Symptoms/injuries after skin contact Tingling/irritation of the skin

Symptoms/injuries after inhalation Irritation of the respiratory tract - Irritation of the nasal mucous membranes

· Information for doctor: Treat symptomatically.

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

No further relevant information available.

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SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents:** Foam, dry chemical powder.
- **For safety reasons unsuitable extinguishing agents:** Do not use water jet.
- **5.2 Special hazards arising from the substance or mixture**
Thermal decomposition or burning may produce carbon monoxide and /or carbon dioxide.
- **5.3 Advice for firefighters**
- **Protective equipment:**
Wear self-contained breathing apparatus and protective clothing to avoid direct contact with eyes, face and skin.
- **Additional information** Cool containers with flooding quantities of water until well after fire is out.

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**
Use extra personal protective equipment (self-contained breathing apparatus).
Keep people away from and upwind of spill/leak. Ensure adequate ventilation. Entry to non-involved personnel should be controlled around the leakage area by roping off, etc.
- **6.2 Environmental precautions:** Prevent entry of product into drains and ground water.
- **6.3 Methods and material for containment and cleaning up:**
Collect leakage in sealable containers. Soak up with sand or other inert absorbent material and transfer into containers for disposal, remove to safe place.
Wash site with sodium bicarbonate solution or soda ash. Clean up area immediately. Ensure adequate ventilation.
- **6.4 Reference to other sections**
Refer to section 8 and 13 for additional information on personal protection equipment and disposal methods.

SECTION 7: Handling and storage

- **7.1 Precautions for safe handling**
Follow good hygiene & safety procedures. Avoid any direct eye & skin contact with the product. Wash with soap after handling.
- **Information about fire - and explosion protection:** Keep away from ignition sources and naked flame.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:**
Keep away from possible contact with incompatible substances.
Store in acid resistant vessels such as stainless steel, aluminum.
Store in the original closed containers. For quality reasons: Avoid elevated temperatures.
- **Information about storage in one common storage facility:** Store away from incompatibles. Store in a dry area.
- **Further information about storage conditions:**
Store in original containers.
Store in sealed containers in a cool and dry place.
- **7.3 Specific end use(s)**
Used in various end-use applications running the gamut of possibilities including Personal Care items like bar soaps, and Household items like fabric softeners, to Industrial Applications including lubricants, metal soaps and numerous intermediate chemicals.

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SECTION 8: Exposure controls/personal protection

· **Additional information about design of technical facilities:** No further data; see item 7.

· **8.1 Control parameters**

· **Ingredients with limit values that require monitoring at the workplace:** Not required.

· **DNELs**

1) DN(M)ELs for workers

Long-term - systemic effects

Dermal: 10 mg/kg bw/day

Inhalation: 17.632 mg/m³

2) DN(M)ELs for the general population

Long-term - systemic effects

Oral: 2.5 mg/kg bw/day

Dermal: 5 mg/kg bw/day

Inhalation: 4.348 mg/m³

· **PNECs**

PNECs (Predicted No Effect Concentration)

1) PNEC water

PNEC aqua (freshwater): 0.007 mg/L PNEC

aqua (marine water): 0.0007 mg/L PNEC

aqua (intermittent releases): 0.15 mg/L

2) PNEC sediment

PNEC sediment (freshwater): 0.0739 mg/kg sediment dw

PNEC sediment (marine water): 0.00739 mg/kg sediment dw

3) PNEC soil

PNEC soil: 0.0107 mg/kg soil dw

4) PNEC for sewage treatment plant

PNEC STP: 912 mg/L

· **Additional information:** The lists valid during the making were used as basis.

· **8.2 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.

· **Respiratory protection:** Self-contained respiratory protective device.

· **Protection of hands:**



Protective gloves

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

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· **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:** Protective work clothing

SECTION 9: Physical and chemical properties

· **9.1 Information on basic physical and chemical properties**· **General Information**· **Appearance:****Form:**

Liquid (at 20 °C and 1013hPa)

Colour:

Clear

· **Odour:**

Pungent

· **Change in condition****Melting point/Melting range:**

3 - 5 °C (1013 hPa)

Boiling point/Boiling range:

ca. 330 °C (1013 hPa)

· **Flash point:**

135-145 °C (1013 hPa)

· **Self-igniting:**

The self-ignition temperature is > 250 °C.

· **Danger of explosion:**

Product does not present an explosion hazard.

· **Explosion limits:****Oxidizing properties**

No oxidizing properties.

· **Vapour pressure at 20 °C:**

<0.01 hPa

· **Density:**

Not determined.

· **Relative density at 20 °C**0.91 g/cm³· **Solubility in / Miscibility with water at 20 °C:**

61.8 - 680 g/l

· **Partition coefficient (n-octanol/water) at 23 °C:** 3.1 log POW (pH 4.7 (OECD 107).)

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- **Viscosity:**
 Dynamic at 20 °C: 7.5 mPas
- **9.2 Other information**
 - 1) *Surface tension :ca. 28.61 mN/m at 20 °C or 25.0 mN/m at 70 °C.*
 - 2) *The dissociation constant is 5.23 - 5.70 at 20 °C or 4.9 at 25 °C.*
 - 3) *Granulometry:*
Justification: In accordance with column 2 of REACH Annex VII, the particle size distribution (Granulometrie) study does not need to be performed as the substance is marketed or used in a non solid or granular form.
 - 4) *Stability in organic solvents and identity of relevant degradation products:*
Justification: In accordance with column 1 of REACH Annex IX, the test does not need to be conducted because the stability of the substance is not considered as critical.
 - 5) *Explosive properties:*
Justification: In accordance with column 2 of REACH Annex VII, the explosiveness of the substance does not need to be tested, because there are no chemical groups associated with explosive properties in the molecule.

SECTION 10: Stability and reactivity

- **10.1 Reactivity**
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:**
Does not decompose up to 204 °C. Thermal decomposition or burning may produce carbon monoxide and/or carbon dioxide.
- **10.3 Possibility of hazardous reactions** *No dangerous reactions known.*
- **10.4 Conditions to avoid** *Avoid contact with incompatible materials*
- **10.5 Incompatible materials:** *Strong oxidizing agents.*
- **10.6 Hazardous decomposition products:** *Carbon monoxide and Carbon dioxide.*

Toxicological information

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

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

124-07-2 octanoic acid

Oral	LD 50	> 2000 mg/kg bw (rat)
Dermal	LD 50	> 2000 mg/kg bw (rabbit) (Read Across from Stearic acid 57-11-4)
Inhalative	LC 50	>0.1521 (rat)

334-48-5 decanoic acid

Oral	LD50	15800 mg/kg bw (rat)
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- **Primary irritant effect:**
- **On the skin:**
Test material: Fatty acids, C8-10
Method: OECD Guideline 404 (Acute Dermal Irritation / Corrosion)

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*Species: rabbit (New Zealand White)**Coverage: semioclusive (shaved)**Evaluation of results : irritating**Erythema score:**3.3 of max. 4 (mean) (Time point: 24 - 48 - 72 h) (not fully reversible within: 21 days)**Edema score:**3.7 of max. 4 (mean) (Time point: 24 - 48 - 72 h) (not fully reversible within: 21 days)**Based on the study, it can be concluded that fatty acids C8-10 is corrosive to skin.***· On the eye:***Test material (Chemical name): octanoic acid**Species: rabbit**Results:**Cornea score: \geq 2 of max. 4 (mean) (Time point: 24 - 72 h) (not reversible)**Iris score: 0 of max. 2 (mean) (Time point: 24 - 72 h)**Conjunctivae score: \geq 2 of max. 3 (mean) (Time point: 24 - 72 h) (not reversible)**Chemosis score: 0 of max. 3 (mean) (Time point: mean 24 - 72 h)**Evaluation of results: irritating**Based on the study, it can be concluded that fatty acids C8-10 regarded as corrosive to eye.***· Sensitization:***Test material: Azelaic acid**Method: OECD Guideline 406 (Skin Sensitisation)**Species : guinea pig (Dunkin-Hartley)**Induction: intradermal and epicutaneous**Challenge: epicutaneous, occlusive**Evaluation of results : Not sensitising**Conclusion: The substance was reported to be not sensitizing in a sensitization intradermal test in guinea pigs***· Subacute to chronic toxicity:***Inhalation: Acute inhalation of fatty acids can cause irritation of the respiratory tract.**Dermal: No Acute dermal toxicity by fatty acids is expected.***· Additional toxicological information:***Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.***· Toxicokinetics, metabolism and distribution***Test material (CAS number): 123-99-9**Absorption*

Due to the role as nutritional energy source, fatty acids are absorbed from the lumen of the intestine by different uptake mechanisms depending on the chain length. Short- and medium chain fatty acids (C1 - C12) are rapidly absorbed via intestine capillaries into the blood stream. For butyrate (C4) for example, an absorption rate of 1.9 $\mu\text{mol}/\text{cm}^2/\text{h}$ (= 167 $\mu\text{g}/\text{cm}^2/\text{h}$) was found in the human intestine. In contrast, long chain fatty acids (>C12) are absorbed into the walls of the intestine via villi and assembled into triglycerides, which then are transported in the blood stream via lipoprotein particles (chylomicrons). This difference in the uptake mechanism of fatty acids is reflected by the percentage of absorption found when human infants were fed a diet containing different fat sources. While an absorption of 99.9 % was found for C8 fatty acid, the long chain C18 fatty acid showed only 64.4 % absorption.

Distribution and Metabolism

Fatty acids are absorbed through the intestine and transported throughout the body. Short chain fatty acids are taken up and transported complexed to albumin via the portal vein into the blood vessels supplying the liver. Medium and long chain fatty acids are esterified with glycerol to triacylglycerides (TAGs) and packaged in chylomicrons. These are transported via the lymphatic system and the blood stream to hepatocytes in the liver as well as to adipocytes and muscle fibers, where they are either stored (i. e. adipose tissue storage depots) or oxidized to yield energy. In addition, some cell types are known to synthesize medium and long chain fatty acids via elongation of shorter fatty acids.

The quantitatively most significant oxidation pathway (β -oxidation pathway) is predominantly located in the cardiac and skeletal muscle. In a first step, the fatty acids are converted to acyl-CoA derivatives (aliphatic acyl-

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CoA) and transported into cells and mitochondria by specific transport systems. Then, the acyl-CoA derivatives are completely metabolized to acetyl-CoA or other key metabolites by the efficient enzymatic removal of the 2-carbon units from the aliphatic acyl-CoA molecule. The complete oxidation of fatty acids via the citric acid cycle leads to H₂O and CO₂. Other pathways for fatty acid catabolism also exist and include α - and ω -oxidation. The resulting main metabolites are acyl-carnitine, acetyl CoA, fatty acyl-CoA, propionyl-CoA and succinyl-CoA.

Excretion

Fatty acids are metabolised by various routes in the body to provide energy. Besides this, fatty acids are stored as lipids in adipose tissue, used as part of cellular membranes, as well as precursors for signalling molecules and even long chain fatty acids. Thus, fatty acids are not expected to be excreted to any significant amount in the urine or faeces.

Repeated dose toxicity

Repeated dose toxicity: oral

Test material (Chemical name): docosanoic acid

Method: OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)

Test type: Subchronic

Route: Oral: gavage.

Doses: 100, 300, 1000 mg/kg bw/d (nominal conc.)

Exposure: - males: 42 days

Results: NOAEL (repeated dose toxicity): 1000 mg/kg bw/day (nominal) (male/female)

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

Mutagenicity

In vitro data

Test material (Chemical name): lauric acid

Method: Ames test

Type of study: Bacterial reverse mutation assay (e.g. Ames test) (gene mutation)

Species: *S. typhimurium* TA 1535, TA 1537, TA 98 and TA 100 (met. act.: with and without)

Species: *S. typhimurium* TA 1538 (met. act.: with and without)

Doses: 4, 20, 100, 500 and 2500 μ g / plate

Test results: Negative for *S. typhimurium* TA 1535, TA 1537, TA 98 and TA 100 (all strains/cell types tested); met. act.: with and without

Negative for *S. typhimurium* TA 1538 (all strains/cell types tested); met. act. With and without

Evaluation of results: negative

Interpretation of results: Based on the result, substance is considered to be non-mutagenic.

Reproduction Toxicity

Effects on fertility

Test material (Chemical name): docosanoic acid

Method: OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)

Species: rat (Sprague-Dawley) male/female

Test type: screening

Route: oral: gavage

Doses: 100, 300, 1000 mg/kg bw/d (nominal conc.)

Exposure: - males: 42 days- females: from 14 days prior to mating to day 3 of lactation (daily)

Results: NOAEL (P): 1000 mg/kg bw/day (nominal) (male/female)

Developmental toxicity

Test material (Chemical name): docosanoic acid

Method: OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)

Species: rat (Sprague-Dawley)

Route: Oral: gavage

Doses: 100, 300, 1000 mg/kg bw /d (nominal conc.)

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Exposure: - males: 42 days- females: from 14 days prior to mating to day 3 of lactation (once daily)
Results: NOAEL (maternal toxicity): 1000 mg/kg bw/day (nominal)
NOAEL (developmental toxicity): 1000 mg/kg bw/day (nominal)

SECTION 12: Ecological information

· **12.1 Toxicity**

· **Aquatic toxicity:** No further relevant information available.

· **12.2 Persistence and degradability**

1) Test material: Octanoic acid

Biodegradation in water:

Screening tests

Test type: Ready biodegradability

Method: OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test)

Inoculum or test system: sewage, domestic, non-adapted

Results:

% Degradation of test substance:

105 after 30 d (O₂ consumption) (2 mg/L)

> 72 after 30 d (O₂ consumption) (5 mg/L)

2) Biodegradation in water and sediment

Justification: In accordance with column 2 of EC 1907/2006 Annex IX 9.2.1.2 and 9.2.1.4 the testing is not required as the substance is readily biodegradable.

3) Biodegradation in Soil

Justification: In accordance with column 2 of EC 1907/2006 Annex IX 9.2.1.3 the testing is not required as the substance is readily biodegradable.

· **12.3 Bioaccumulative potential**

Test material: Sodium laurate

Bioaccumulation

Method: OECD Guideline 305 E (Bioaccumulation: Flow-through Fish Test)

Route of exposure: aqueous (freshwater)

Species: Danio rerio

Total uptake duration: 28 d

BCF: 234 - 249 L/kg (whole body w.w.) (steady state)

BCF: 236 - 282 L/kg (whole body w.w.) (steady state)

BCF: 238 - 288 L/kg (whole body w.w.) (steady state)

· **12.4 Mobility in soil**

Soil Adsorption Coefficient :

Test material (chemical name): octanoic acid

Method: KOCWIN programme v2.00

Koc: 69.63 at 25 °C

log Koc: 1.84 at 25 °C

· **Additional ecological information:**

· **General notes:** Must not reach sewage water or drainage ditch undiluted or unneutralized.

· **12.5 Results of PBT and vPvB assessment** Not PBT or vPvB

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

· **12.6 Other adverse effects** No further relevant information available.

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SECTION 13: Disposal considerations

- **13.1 Waste treatment methods**
- **Recommendation**
Must not be disposed together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packaging:**
- **Recommendation:** Dispose off according to Federal, State and Local Regulations.

SECTION 14: Transport information

- | | |
|--|---|
| · 14.1 UN-Number | |
| · ADR, IMDG, IATA | 3265 |
| · 14.2 UN proper shipping name | |
| · ADR | 3265 CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.
(Fatty acids, C8-10) |
| · IMDG, IATA | 3265 CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.
(Fatty acids, C8-10) |
| · 14.3 Transport hazard class(es) | |
| · ADR, IMDG, IATA | |
| |  |
| · Class | 8 Corrosive substances. |
| · Label | 8 |
| · 14.4 Packing group | |
| · ADR, IMDG, IATA | III |
| · 14.5 Environmental hazards: | |
| · Marine pollutant: | No |
| · 14.6 Special precautions for user | Warning: Corrosive substances. |
| · Danger code (Kemler): | 80 |
| · EMS Number: | F-A,S-B |
| · 14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code | Not applicable. |
| · Transport/Additional information: | |
| · ADR | |
| · Limited quantities (LQ) | 5L |
| · Transport category | 3 |
| · Tunnel restriction code | E |
| · UN "Model Regulation": | 3265 CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S., 8, III |

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SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
The CSR has been completed
Please refer to Annex I for risk management measures and exposure scenario.
- **National regulations:**
- **Other regulations, limitations and prohibitive regulations**
- **Substances of very high concern (SVHC) according to REACH, Article 57** *The substance is not listed as SVHC.*
- **15.2 Chemical safety assessment:** *A Chemical Safety Assessment has been carried out.*

SECTION 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 MSDS:** *Quality Assurance*
- **Contact:** *Mr. C.R. Marathe*
Email ID: -cr.marathe@vvltd.com
- **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)
IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)
ICAO: International Civil Aviation Organization
ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)
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
IATA: International Air Transport Association
GHS: Globally Harmonized System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
DNEL: Derived No-Effect Level (REACH)
PNEC: Predicted No-Effect Concentration (REACH)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
Skin Corr. 1B: Skin corrosion/irritation, Hazard Category 1B
- **Sources**
REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006
<http://ecb.jrc.ec.europa.eu/esis/>
Registerd Dossier:
<http://apps.echa.europa.eu/registered/data/dossiers/DISS-a000e66d-5d77-04f2-e044-00144f67d031/DISS-a000e66d-5d77-04f2-e044-00144f67d031 DISS-a000e66d-5d77-04f2-e044-00144f67d031.html>
Chemical Safety Report: CSR 68937-75-7
VVF Limited MSDS
- *** Data compared to the previous version altered.**
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.

(Contd. on page 13)

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Safety data sheet
COMMISSION REGULATION (EU) No 453/2010 of 20 May 2010
amending Regulation (EC) No 1907/2006

VVF(INDIA)LIMITED

Trade name: Fatty acids, C8-10

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Section 11: Toxicological Information.
Section 12: Ecological Information.
Section 13 - Disposal Considerations
Section 14 - Transport information
Section 15 - Regulatory Information