



VVF(INDIA)LIMITED

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

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

- **1.1 Trade name:** octanoic acid
- **CAS Number:**  
124-07-2
- **EC number:**  
204-677-5
- **Registration number** 01-2119552491-41-0001
- **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), SU 21 Private households (= general public = consumers)  
 SU5 Manufacture 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  
 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 (Contd. of page 1)

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

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 manufacture of : food products, textiles, leather, fur; pulp, paper and paper products; bulk, large scale chemicals (including petroleum products).
- Electricity, steam, gas water supply and sewage treatment.
- Used in washing and cleaning products (including solvent based products)
- Used for Synthesis of various dyes, drugs, perfumes, antiseptics and fungicides, ore separations, synthetic flavors.
- Used in hydraulic fluids, machining oils, flotation agents, and as a wood preservative, Synthetic lubricants, medium-chain triglycerides.

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

**Manufacturer/Supplier:**

VVF (INDIA) LIMITED

Reg. Office: 109, Sion East,

Mumbai-400022

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## 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.**

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- **2.2 Label elements**
- **Labelling according to Regulation (EC) No 1272/2008**  
*The substance is classified and labelled according to the CLP regulation.*
- **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**  
*124-07-2 octanoic acid*
- **Identification number(s)**
- **EC number:** *204-677-5*
- **Additional information:**
  - Molecular Formula: C<sub>8</sub>H<sub>16</sub>O<sub>2</sub>*
  - Molecular Weight: 144.22 g/mol*
  - Degree of purity: > 99.1 - < 100 % w/w*
  - Typical concentration: Ca. 99.5 % w/w*

### SECTION 4: First aid measures

- **4.1 Description of first aid measures**
- **General information:**  
*Immediately remove any clothing soiled by the product.*  
*Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.*

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- **After inhalation:**  
Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a poison center or doctor.
- **After skin contact:**  
Remove/Take off immediately all contaminated clothing. Gently wash with plenty of soap and water. Immediately call a doctor.
- **After eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor.
- **After swallowing:**  
Do not give anything through mouth to unconscious person. Do not induce vomiting. Call a doctor immediately.
- **4.2 Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **4.3 Indication of any immediate medical attention and special treatment needed**  
No further relevant information available.

### SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents:** Use dry powder, foam, carbon dioxide.
- **For safety reasons unsuitable extinguishing agents:** Water jet.
- **5.2 Special hazards arising from the substance or mixture**  
Combustible, keep away from open flame, no smoking.
- **5.3 Advice for firefighters**
- **Protective equipment:** Wear Self-contained breathing apparatus, protective clothing and face mask.

### 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:** Do not allow to enter sewers/ surface or ground water.
- **6.3 Methods and material for containment and cleaning up:**  
Absorb spilled material in a suitable absorbent (e.g. rag, dry sand, earth, saw-dust) and collect in suitable containers. In case of large amount of spillage, contain a spill by bunding. Adhered or collected material should be promptly disposed off, in accordance with appropriate laws and regulations.
- **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**  
Handling is performed in a well ventilated place. Wear suitable protective equipment. Use corrosive resistant equipment. Avoid contact with skin, eyes and clothing. Wash hands and face thoroughly after handling. Use a closed system if possible. Prevent generation of vapor or mist. Use a ventilation, local exhaust if vapor or aerosol will be generated.
- **Information about fire - and explosion protection:** Protect from heat.

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- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:**  
 Install a closed system or local exhaust. Also install safety shower and eye bath.  
 Suitable Packing Materials: HDPE (High Density Polyethylene) carboys, Stainless steel, aluminium tanks or acid resistant resin lined MS drums.
- **Information about storage in one common storage facility:**  
 Store away from incompatible materials such as oxidizing agents.
- **Further information about storage conditions:**  
 Store in original container in areas inaccessible to children and persons unfamiliar with its proper use. Store in a cool, dry area, away from direct sunlight and heat. Keep containers tightly sealed.
- **7.3 Specific end use(s)**
  - Used in manufacture of: food products, textiles, leather, fur; pulp, paper and paper products; bulk, large scale chemicals (including petroleum products).
  - Electricity, steam, gas water supply and sewage treatment.
  - Used in formulation [mixing] of preparations and/or re-packaging (excluding alloys).
  - Used in washing and cleaning products (including solvent based products)

### SECTION 8: Exposure controls/personal protection

- **Additional information about design of technical facilities:**  
 Requirement of properly operating chemical fume hood designed for hazardous chemicals and having an average face velocity of atleast 100 feet per minute.
- **8.1 Control parameters**
- **Ingredients with limit values that require monitoring at the workplace:** Not required.
- **DNELs**  
 DN(M)ELs for workers:  
 Long-term - systemic effects-Dermal  
 DNEL (Derived No Effect Level)-10 mg/kg bw/day  
 Long-term - systemic effects-Inhalation  
 DNEL (Derived No Effect Level)-17.632 mg/m<sup>3</sup>  
 DN(M)ELs for the general population:  
 Long-term - systemic effects-Dermal  
 DNEL (Derived No Effect Level)-5 mg/kg bw/day  
 Long-term - systemic effects-Inhalation  
 DNEL (Derived No Effect Level)-4.348 mg/m<sup>3</sup>  
 Long-term - systemic effects-Oral  
 DNEL (Derived No Effect Level)-2.5 mg/kg bw/day
- **PNECs**  
 PNEC water-  
 PNEC aqua (freshwater): 0.007 mg/L  
 PNEC aqua (marine water): 0.0007 mg/L  
 PNEC aqua (intermittent releases): 0.22 mg/L  
 PNEC sediment-  
 PNEC sediment (freshwater): 0.0739 mg/kg sediment dw  
 PNEC sediment (marine water): 0.00739 mg/kg sediment dw  
 PNEC soil-  
 PNEC soil: 0.0107 mg/kg soil dw  
 PNEC sewage treatment plant-  
 PNEC STP: 912 mg/L



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*PNEC oral-*

*PNEC oral: 66.66 mg/kg food*

· **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:**

*Half or full facepiece respirator, self-contained breathing apparatus(SCBA), supplied air respirator, etc. Use respirators approved under appropriate government standards and follow local and National regulations.*

· **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*

· **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 protective clothing, Protective rubber boots if the situation requires.*

### SECTION 9: Physical and chemical properties

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

· **General Information**

· **Appearance:**

**Form:** *Liquid*

**Colour:** *Colourless*

· **Odour:** *Slight odour*

· **Change in condition**

**Melting point/Melting range:** *16-16.85 °C*

**Boiling point/Boiling range:** *237 °C*

· **Flash point:** *130 - 135.6 °C*

· **Ignition temperature:** *>300 °C*

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· <b>Danger of explosion:</b>	Product does not present an explosion hazard.
· <b>Explosion limits:</b>	
Lower:	1.4 Vol %
· <b>Oxidizing properties</b>	not an oxidising liquid
· <b>Vapour pressure at 25 °C:</b>	0.49 Pa
· <b>Density:</b>	
Relative density at 20 °C	0.91 g/cm <sup>3</sup>
· <b>Solubility in / Miscibility with water at 20 °C:</b>	0.68 g/l
· <b>Partition coefficient (n-octanol/water):</b>	3.05 log POW
· <b>Viscosity:</b>	
Dynamic at 20 °C:	6 mPas
Kinematic at 20 °C:	6.6 mm <sup>2</sup> /s
· <b>9.2 Other information</b>	1. Dissociation constant-5.23 - 5.30 at 20 °C 2. The substance is combustible, but very poorly flammable.

### SECTION 10: Stability and reactivity

- **10.1 Reactivity** None known
- **10.2 Chemical stability** Stable under normal operation conditions
- **Thermal decomposition / conditions to be avoided:**  
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** Overheating
- **10.5 Incompatible materials:** Avoid strong oxidizing agents
- **10.6 Hazardous decomposition products:** Carbon monoxide, Carbon dioxide.

### SECTION 11: Toxicological information

#### · 11.1 Information on toxicological effects

##### · Acute toxicity:

##### · LD/LC50 values relevant for classification:

Oral	LD 50	> 2000 mg/kg bw (rat(Wistar)male/female) > 5000 mg/kg bw (rat(Wistar)male/female)
Dermal	LD50	> 2000 mg/kg bw (rabbit) (Read-across from stearic acid CAS 57-11-4)
Inhalative	LC 50 (4Hr)	> 0.1621 mg/L air (rat)

##### · Primary irritant effect:

##### · on the skin:

The test substance is corrosive to skin-

1. Species rabbit (New Zealand White)- Coverage: occlusive (clipped)

Result:

Erythema score:

≥ 3.3 of max. 4 (mean) (Time point: mean 24 - 48 h) (not fully reversible within: 48 h in 5/6) (concentration: 100 %)

0 of max. 4 (mean) (Time point: 24 - 48 h) (fully reversible) (concentration: 30% - 70%)

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*Edema score:*

3.2 of max. 4 (mean) (Time point: mean 24 - 48 h) (not fully reversible within: 48 h in 5/6 animals) (concentration: 100%)

0 of max. 4 (mean) (Time point: mean 24 - 48 h) (fully reversible) (concentration: 30% - 70%)

2.Species:rabbit (New Zealand White) Coverage: occlusive (clipped)

Results:

*Erythema score:*

3.3 of max. 4 (mean) (Time point: mean 24 - 48 h) (not fully reversible within: 48 h) (concentration: 100%)

*Edema score:*

2.5 of max. 4 (mean) (Time point: mean 24 - 48 h) (not fully reversible within: 48 h) (concentration: 100%)

**· on the eye:**

Species:Rabbit

Result:corrosive

Cornea score:

≥ 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:

≥ 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)

**· Sensitization:**

1.Species:guinea pig

Type of test:Buehler test

Test substance:Readacross CAS:334-48-5(decanoic acid )

Induction: epicutaneous, occlusive

Challenge: epicutaneous, occlusive

Result:Non sensitising

2.Species:guinea pig (Pirbright-white)

Type of test:Guinea pig maximisation test

Test substance:Readacross CAS 143-07-7(lauric acid )

Result:not sensitising

3.Species:guinea pig (Dunkin-Hartley) male/female

Type of test:Guinea pig maximisation test

Test substance:Readacross CAS 123-99-9 (azelaic acid)

Result:not sensitising

4.Species:Human

Type of test:patch test (epicutaneous test)

Result:Not sensitising,- Number of subjects with negative reactions: 25/25

**· 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**

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*Test substance : Readacross CAS 123-99-9*

*Study type: Six healthy male volunteers received a single topical treatment with 5 g of an anti-acne cream containing 20% azelaic acid (AzA) onto the face, the chest and the upper back.*

*Result: After dermal application of 5 g of cream containing 20% of Azelaic acid at a skin area dose of 5 mg/cm<sup>2</sup> maximum concentrations 7.8 ± 3.2 µg/ml (11.29 ± 0.5% of the dose applied) have been measured in the urine within the first 24 h. During the 2nd and 3rd d 0.76 ± 0.49% and 0.12 ± 0.15% of the dose, respectively, was excreted unchanged with the urine. The total amount of Azelaic acid excreted unchanged with the urine within 3 d was determined to 2.2 ± 0.7% of the dose. After oral administration a mean concentration of Azelaic acid of 424 ± 104 µg/ml was found in the 0-24 h urine samples, corresponding to 61.2 ± 8.8% of the dose administered. Excretion was complete within 24 h.*

**· Repeated dose toxicity**

*Repeated dose toxicity: oral*

*1. Species-rat (Sprague-Dawley) male/female*

*Test substance: CAS 112-85-6 (Docosanoic acid)*

*Route: subchronic (oral: gavage)*

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

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

*2. Species-rat (Osborne-Mendel) male*

*Test substance: CAS 143-07-7 (lauric acid)*

*Route: subchronic (oral: feed)*

*Result: NOAEL: ca. 10000 mg/kg bw/day (nominal) (male) based on: test mat. (no substance-related effects were noted)*

**· CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**

*a. Carcinogenicity: This information is not available.*

*b. Mutagenicity:*

*1. Method-mammalian cell gene mutation assay (gene mutation)*

*Test substance-Readacross Decanoic acid*

*Results: negative*

*2. Method-bacterial reverse mutation assay (e.g. Ames test) (gene mutation)*

*Test substance-octanoic acid*

*Species-S. typhimurium, other: TA 98, TA 100, TA 1535, TA 1537 and TA 1538 (met. act.: with and without)*

*Doses: 4, 20, 100, 500 and 2500 µg / plate*

*Results: negative*

*3. Method-bacterial reverse mutation assay (e.g. Ames test) (gene mutation)*

*Test substance-Readacross Docosanoic acid*

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

*Results: negative*

*c. Toxicity for reproduction:*

*1. Species rat (Sprague-Dawley) male/female*

*Test substance-Docosanoic acid*

*Route-oral: gavage*

*Dose-100, 300, 1000 mg/kg bw/d (nominal conc.)*

*Result-NOAEL (P): 1000 mg/kg bw/day (nominal) (male/female)*

*d. Developmental toxicity:*

*1. Species-rat (Sprague-Dawley)*

*Test substance-Readacross Docosanoic acid*

*Route-oral: gavage*

*Dose-100, 300, 1000 mg/kg bw /d (nominal conc.)*

*Result-*

*NOAEL (maternal toxicity): 1000 mg/kg bw/day (nominal)*

*NOAEL (developmental toxicity): 1000 mg/kg bw/day (nominal)*

*2. Species: rat (Sprague-Dawley)*

*Test substance: octanoic acid*

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Route oral: gavage  
 Dose: 18.75 mmol/kg bw (nominal conc.)  
 2704 mg/kg bw (nominal in water (calculated))  
 Result: NOAEL (developmental toxicity): 2704 mg/kg bw (total dose)

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### SECTION 12: Ecological information

#### 12.1 Toxicity

##### Aquatic toxicity:

EC50 (48 h) (static)	550 mg/L ( <i>Daphnia magna</i> ) (Freshwater)
EC50 (72 h)	31 mg/L ( <i>Pseudokirchneriella Subcapitata</i> ) (freshwater static)
LC50 (48 h)	128 mg/L <i>Hyale plumulosa</i> ( <i>Gammarus</i> ) (saltwater semistatic) 134 mg/L ( <i>Cyprinus carpio</i> ) (Freshwater) 150 mg/L ( <i>Oryzias latipes</i> ) (Freshwater) 170 mg/L test mat. (nominal) ( <i>Leuciscus idus</i> ) (Freshwater)
LC50 (96 h) (static)	22 mg/L test mat. (nominal) ( <i>Fish Lepomis macrochirus</i> ) (Freshwater) 39.9 mg/L test mat. (nominal) ( <i>Fish Lepomis macrochirus</i> ) (Freshwater)
NOEC (72 h)	0.07 mg/L ( <i>Pseudokirchneriella Subcapitata</i> ) (freshwater static)

##### 629-25-4 sodium laurate

NOEC (28 d) Long-term toxicity to fish	6.4 mg/L (growth rate), 2 mg/L (mobility) ( <i>Danio rerio</i> ) (Flowthrough fresh water)
--	--

##### 334-48-5 decanoic acid

EC50 (48 h) (static)	> 20 mg/L (nominal) & > 21 mg/L (geometric) ( <i>Daphnia magna</i> ) (Freshwater)
NOEC (21 d) Long-term toxicity to aquatic invertebra	0.2 mg/L ( <i>Daphnia magna</i> ) (Freshwater semistatic) 0.64 mg/L ( <i>Daphnia magna</i> ) (freshwater semistatic)

#### 12.2 Persistence and degradability

##### Biodegradation in water:

##### 1. Test type: ready biodegradability

Inoculum: sewage, domestic, non-adapted

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

Result-% Degradation of test substance:

105 after 30 d (O<sub>2</sub> consumption) (2 mg/L)

> 72 after 30 d (O<sub>2</sub> consumption) (5 mg/L)

##### 2. Test type: ready biodegradability

Inoculum: activated sludge, domestic, non-adapted

OECD Guideline 301 B (Ready Biodegradability: CO<sub>2</sub> Evolution Test)

Results-% Degradation of test substance:

51.6 after 28 d (CO<sub>2</sub> evolution) (10 mg/L)

54.4 after 28 d (CO<sub>2</sub> evolution) (20 mg/L)

The substance is readily biodegradable.

##### Biodegradation in soil-

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*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**

*Aquatic bioaccumulation-*

*Species-Danio rerio*

*Type of medium-aqueous (freshwater) flow-through*

*Total uptake duration: 28 d*

*Results-*

*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**

*Study type: adsorption (calculation) estimated by calculation*

*Adsorption coefficient:*

*Koc: 69.63 at 25 °C*

*log Koc: 1.84 at 25 °C*

· **Additional ecological information:**

· **General notes:**

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

*Must not reach sewage water or drainage ditch undiluted or unneutralized.*

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

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

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

### SECTION 13: Disposal considerations

· **13.1 Waste treatment methods**

· **Recommendation** Do not dispose of via sinks, drains or into the immediate environment

· **Uncleaned packaging:**

· **Recommendation:** Disposal must be made according to official 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. (Octanoic acid)

· **IMDG, IATA** Corrosive liquid, acidic, organic, n.o.s. (Octanoic acid)

· **14.3 Transport hazard class(es)**

· **ADR**



· **Class**

8 Corrosive substances.

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· <b>Label</b>	8
· <b>IMDG, IATA</b>	
· <b>Class</b>	8 Corrosive substances.
· <b>Label</b>	8
· <b>14.4 Packing group</b>	
· <b>ADR, IMDG, IATA</b>	III
· <b>14.5 Environmental hazards:</b>	
· <b>Marine pollutant:</b>	No
· <b>14.6 Special precautions for user</b>	Warning: Corrosive substances.
· <b>Danger code (Kemler):</b>	80
· <b>14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</b>	Not applicable.
· <b>Transport/Additional information:</b>	
· <b>ADR</b>	
· <b>Limited quantities (LQ)</b>	LQ7
· <b>Transport category</b>	3
· <b>UN "Model Regulation":</b>	UN 3265, CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S., 8, III

### SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Labelling according to Regulation (EC) No 1272/2008**
- **Hazard pictograms** Please refer section 2
- **Signal word** Danger
- **Hazard statements** Please refer section 2
- **Precautionary statements** Please refer section 2
- **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)

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*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/>*

*[http://echa.europa.eu/chem\\_data/authorisation\\_process/candidate\\_list\\_table\\_en.asp](http://echa.europa.eu/chem_data/authorisation_process/candidate_list_table_en.asp)*

*Chemical Safety Report: CSR:124-07-2 Provided by the lead registrant.*

*IUCLID: <http://ecb.jrc.ec.europa.eu/IUCLID-DataSheets/124072.pdf>*

*HSDB: <http://toxnet.nlm.nih.gov/cgi-bin/sis/search/f?./temp/~xyi8K5:1>*

**· \* 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.*

*Section 11: Toxicological Information.*

*Section 12: Ecological Information.*

*Section 13 - Disposal Considerations*

*Section 15 - Regulatory Information*

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