1. Product identifier

Product name: VERSATIC™ Acid 10

SDS Number: V9113

Substance name: neodecanoic acid

Registration number: 01-2119449554-33-0001

EC number: 248-093-9

CAS number: 26896-20-8

Product Type: Acid

2. Relevant identified uses of the substance or mixture and uses advised against

Product use: Industrial use.

3. Details of the supplier of the safety data sheet

Manufacturer, importer, supplier: Momentive Specialty Chemicals B.V.

Seattleweg 17

3195 ND Pernis - Rotterdam

The Netherlands

Contact person: 4information@momentive.com

Telephone: General Information:
+31 6 52 511079

REACH Reg. Legal Entity: Momentive Specialty Chemicals B.V.

Seattleweg 17, Building 4,

3195 ND Pernis - Rotterdam, The Netherlands

4. Emergency telephone number

Emergency telephone: CARECHEM24

+44(0)1235 239 670

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) 1272/2008 (CLP)

<table>
<thead>
<tr>
<th>Hazard Class</th>
<th>Category</th>
<th>Hazard statement Code(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not classified.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Classification according to Directive 67/548/EEC (DSD)

The product is not classified as dangerous according to Directive 67/548/EEC and its amendments.
Classification : Not classified.

**Adverse effects**
No known significant effects or critical hazards.

See Section 16 for the full text of the H statements and R phrases declared above.

**2.2. Label elements**

Signal word : No signal word.

Hazard statements : No known significant effects or critical hazards.

**2.3. Other hazards**

The data show that the properties of the substance do not meet the specific criteria detailed in Annex XIII and, consequently, that the substance is not considered a PBT/vPvB.

### SECTION 3: Composition/information on ingredients

**Substance/mixture** : Mono-constituent substance

<table>
<thead>
<tr>
<th>Ingredient name</th>
<th>REG # /CAS #/EC #</th>
<th>Classification</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>neodecanoic acid</td>
<td>01-2119449554-33/26896-20-8/248-093-9</td>
<td></td>
<td>100</td>
</tr>
</tbody>
</table>

See Section 16 for the full text of the H statements and R phrases declared above.

### SECTION 4: First aid measures

**4.1. Description of first aid measures**

**First aid measures**

**Inhalation** : Move exposed person to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Get medical attention if symptoms occur.

**Ingestion** : Wash out mouth with water. Move exposed person to fresh air. Keep person warm and at rest. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.

**Skin contact** : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.

**Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove
any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention if irritation occurs.

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

**Over-exposure signs/symptoms**

- **Inhalation**: No known significant effects or critical hazards.
- **Ingestion**: No known significant effects or critical hazards.
- **Skin**: No known significant effects or critical hazards.
- **Eyes**: No known significant effects or critical hazards.

See section 11 for more detailed information on health effects and symptoms.

4.3. Indication of immediate medical attention and special treatment needed

**Notes to physician**: No specific treatment. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

**Protection of first aid personnel**: No action shall be taken involving any personal risk or without suitable training.

SECTION 5: Fire-fighting measures

5.1. Extinguishing media

**Suitable**: Use an extinguishing agent suitable for the surrounding fire.

**Not suitable**: None known.

5.2. Special hazards arising from the substance or mixture

- **Hazards from the substance or mixture**: In a fire or if heated, a pressure increase will occur and the container may burst.
- **Hazardous thermal decomposition products**: Decomposition products may include the following materials: carbon dioxide, carbon monoxide,

5.3. Special protective actions for fire-fighters

- **Special precautions for fire-fighters**: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
- **Special protective equipment for fire-fighters**: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment (see section 8).

6.2. Environmental precautions
Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

6.3. Methods and material for containment and cleaning up

**Small spill**
- Move containers from spill area. Dispose of via a licensed waste disposal contractor. Stop leak if without risk. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container.

**Large spill**
- Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Dispose of via a licensed waste disposal contractor. Note: see section 1 for emergency contact information and section 13 for waste disposal. Stop leak if without risk. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see section 13).

### SECTION 7: Handling and storage

The substance/product is registered with strictly controlled conditions as defined in Article 18(4) of Regulation (EC) No. 1907/2006 (REACH Regulation) and must therefore be handled as such.

Therefore, the substance must be rigorously contained by technical means during its whole lifecycle including manufacture, purification, cleaning and maintenance of equipment, sampling, analysis, loading and unloading of equipment or vessels, waste disposal or purification and storage.

Strictly controlled conditions must be achieved without the use of personal protective equipment (PPE) except for the exceptional situations. PPE can only be part of the strictly controlled conditions for:

1) Accidents and incidents that may occur despite appropriate management systems and operational procedures, and

2) Maintenance and cleaning works, providing that special procedures such as purging and washing are applied before the system is opened or entered.

### 7.1. Precautions for safe handling

Put on appropriate personal protective equipment (see section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking.

### 7.2. Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

**Packaging materials**

**Recommended**
- Use original container.
Specific uses : Industrial use.

7.3. Specific end use(s)

Not applicable.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limit values

<table>
<thead>
<tr>
<th>Ingredient name</th>
<th>Occupational exposure limits</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Derived No-Effect Levels’ (DNEL’s) and Predicted No-Effect Concentrations’ (PNEC’s)

Explanatory note:

REACH requires manufacturers and importers to establish and report ‘Derived No-Effect Levels’ (DNEL’s) for humans by inhalation, ingestion and dermal routes of exposure and ‘Predicted No-Effect Concentrations’ (PNEC’s) for environmental exposure. DNEL’s and PNEC’s are established by the registrant without an official consultation process, and are not intended to be directly used for setting workplace or general population exposure limits. They are primarily used as input values in running Quantitative Risk Assessment models (like the ECETOC-TRA model).

Due to differences in calculation methodology the DNEL will tend to be lower (sometimes significantly) than any corresponding health-based OEL for that chemical substance. Further although DNEL’s (and PNEC’s) are an indication for setting risk reduction measures, it should be recognized that these limits do not have the same regulatory application as officially endorsed governmental OEL’s.

<table>
<thead>
<tr>
<th>DNELs</th>
<th>Ingredient name</th>
<th>Exposure /Effects</th>
<th>DNELs</th>
<th>Population</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>neodecanoic acid</td>
<td>Long term Dermal/Systemic</td>
<td>7.41 mg/kg bw/day</td>
<td>Workers</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Long term Inhalation/Systemic</td>
<td>22.04 mg/m³</td>
<td>Workers</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Long term Dermal/Systemic</td>
<td>1.06 mg/kg bw/day</td>
<td>General</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Long term Inhalation/Systemic</td>
<td>6.52 mg/m³</td>
<td>General</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Long term Oral/Systemic</td>
<td>1.88 mg/kg bw/day</td>
<td>General</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PNECs</th>
<th>Ingredient name</th>
<th>Compartment Detail</th>
<th>PNECs</th>
<th>Method Detail</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>neodecanoic acid</td>
<td>Fresh water</td>
<td>0.478 mg/l</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Marine</td>
<td>0.0478 mg/l</td>
<td></td>
</tr>
</tbody>
</table>

8.2. Exposure controls

The substance/product is registered with strictly controlled conditions as defined in Article 18(4) of Regulation (EC) No. 1907/2006 (REACH Regulation) and must therefore be handled as such.

Therefore, the substance must be rigorously contained by technical means during its whole lifecycle including manufacture, purification, cleaning and maintenance of equipment, sampling, analysis, loading and unloading of equipment or vessels, waste disposal or purification and storage.

Procedural and control technologies should be used as the primary means to minimize emissions and any resulting exposures.

Conditions and Measures to be selected to reduce exposure and risk:

- Continuous or batch substance flow from reactor or mixing vessels to storage or distribution tanks.
- Low emission permanent installation pipe connections and flanges emission control system.
- Double sealed pumps.
- Overhead vapour recovery and removal system.
- Sealed tanks and reactor vessel with safety releases.
- Safety releases and venting done to specific controlled emission points or to emission control equipment.
- Remotely operated values and process equipment to isolate worker from process operation
- Product quality sampling system to minimize worker exposure. (i.e. closed bottle filling systems)
- For laboratory analysis, positive flow fume hoods.
- Purging and venting procedures prior to maintenance work.

**Must utilize a combination of operational risk management measures or procedures typically including:**
- Worker training in process operations.
- Workers safety training.
- Process Safety Management reviews to identify and minimize risk of process releases and accidents.
- Job Hazard Analysis
- Spill Control and Countermeasures plan and Emergency Procedures
- Preventative maintenance program.
- Safety valve monitoring and replacement procedure.
- Accident reporting, investigation and remedial action procedure.
- Leak detection and monitoring procedure.
- Site industrial hygiene and PPE procedure.
- Permit to Work and Equipment Safe Isolation program

Strictly controlled conditions must be achieved without the use of personal protective equipment (PPE) except for the exceptional situations. PPE can only be part of the strictly controlled conditions for:

1) Accidents and incidents that may occur despite appropriate management systems and operational procedures, and

2) Maintenance and cleaning works, providing that special procedures such as purging and washing are applied before the system is opened or entered.

**Recommended monitoring procedures**

If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to European Standard EN 689 for methods for the assessment of exposure by inhalation to chemical agents and national guidance documents for methods for the determination of hazardous substances. If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment.

**Occupational exposure controls**

No special ventilation requirements. Good general ventilation should be sufficient to control worker exposure to airborne contaminants. If this product contains ingredients with exposure limits, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure below any recommended or statutory limits.

**Hygiene measures**

Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the
lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

**Respiratory protection**: Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

**Hand protection**: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

Recommended: - PVC gloves

**Eye protection**: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts.

**Skin protection**: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

**Environmental exposure controls**: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation.

### SECTION 9: Physical and chemical properties

#### 9.1. Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Appearance</strong></td>
<td></td>
</tr>
<tr>
<td>Physical state</td>
<td>Liquid</td>
</tr>
<tr>
<td>Color</td>
<td>Water white</td>
</tr>
<tr>
<td>Odor</td>
<td>strong</td>
</tr>
<tr>
<td>Odor threshold</td>
<td>Not available</td>
</tr>
<tr>
<td>pH</td>
<td>Not available</td>
</tr>
<tr>
<td>Melting Point</td>
<td>Less than -30 °C(-22 °F)</td>
</tr>
<tr>
<td>Initial boiling point and boiling range</td>
<td>270 - 280 °C (518 - 536 °F)</td>
</tr>
<tr>
<td>Flash point</td>
<td>129 °C (264 °F)</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>Not available</td>
</tr>
<tr>
<td>Flammability</td>
<td>Not determined</td>
</tr>
<tr>
<td>Explosion limits</td>
<td></td>
</tr>
<tr>
<td>Upper:</td>
<td>Not available</td>
</tr>
<tr>
<td>Lower:</td>
<td>Not available</td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>Less than 3 kPa @20 °C (68 °F)</td>
</tr>
<tr>
<td>Vapor density</td>
<td>5.9</td>
</tr>
<tr>
<td>Relative density</td>
<td>Not available</td>
</tr>
<tr>
<td>Solubility</td>
<td>@25 °C(77 °F) Negligible</td>
</tr>
<tr>
<td>Partition coefficient:</td>
<td>LogPow 2.11</td>
</tr>
<tr>
<td>n-octanol/water</td>
<td></td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>Not available</td>
</tr>
</tbody>
</table>
Decomposition temperature : Not determined
Viscosity

<table>
<thead>
<tr>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kinematic</td>
<td>45 mm²/s @20 °C (68 °F)</td>
</tr>
<tr>
<td>Dynamic</td>
<td>Not available</td>
</tr>
</tbody>
</table>

Explosive properties : Not determined
Oxidising properties : Not determined

9.2. Other information
Not applicable.

SECTION 10: Stability and reactivity

10.1. Reactivity
Stable under normal conditions.

10.2. Chemical stability
The product is stable.

10.3. Possibility of hazardous reactions
Under normal conditions of storage and use, hazardous reactions will not occur.

10.4. Conditions to avoid
No specific data.

10.5. Incompatible materials
No specific data.

10.6. Hazardous decomposition products
Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

*neodecanoic acid*

Acute toxicity

**Oral**
LD50: Rat 2,066 mg/kg;
In this study, male and female rats were gavage with neodecanoic acid at concentrations of 1, 1.5, 2, 3, or 4 ml/kg. All animals that died during the study did so within 3 days of exposure. Signs of toxicity included lethargy, hypothermia, piloerection, dyspnea, and ataxia. Based on these results, it is concluded that the LD50 is approximately 2.27 ml/kg (2066 mg/kg).

**Dermal**
LD50: Rat 3,640 mg/kg;
In this study male and female rats were exposed to 4 ml/kg (3640 mg/kg) neodecanoic acid via an occluded dermal patch for 24 hours. After 24 hours, the patch was removed and clinical observations were made once daily for 9 days. There were no deaths observed in this study and there were no signs of a toxicity response. It is concluded that the LD50 is greater than 3640 mg/kg.

**Inhalation**
No applicable toxicity data. No known significant effects or critical hazards.
Neodecanoic acid was administered via a vapor inhalation to 10 each of mice, rats, and guinea pigs at the nominal concentration of 3 mg/l for 6 hours. Clinical observations were made every 30 minutes during the exposure and daily thereafter for 14 days. No significant signs of respiratory irritation were noted. Alopecia and some weight loss were noted in the guinea pigs during the 14-day observation period. Two guinea pigs died on the 2nd day, 1 on the 13th, and 2 on the 14th post exposure. All mice and rats survived. Based on these data it is concluded that the LC50 for mice and rats is greater than 3 mg/l.

Other routes
No applicable toxicity data. No known significant effects or critical hazards.

**Skin corrosion/irritation**
Neodecanoic acid was administered via an occluded dermal patch to 6 rabbits at a dose of 0.5 ml neat solution for 4 hours to assess the skin irritation potential. Dermal evaluations occurred at 45 minutes, 24h, 48h, 72h, and 7 days post patch removal. Application sites were graded for erythema, edema, and other signs of dermal irritation according to the Draize method of scoring. Topical application elicited very slight erythema in one animal at the 45 minute interval. Erythema increased after the 45 minute interval. At the 24 hour interval, one animal was noted with well-defined erythema and two animals were noted with very slight erythema. At the 48 hour interval, one animal was noted with well-defined erythema and three animals with very slight erythema. Four animals were noted with very slight erythema at the 71 hour interval. Erythema decreased at the Day 7 interval; one animal was noted with very slight erythema. Edema was not noted at any observation point. Desquamation was noted for three animals at the Day 7 interval. The mean skin irritation scores between 24 and 72 hours were: erythema 0.72 and edema 0.

**Serious eye damage/irritation**
Versatic 10 (neodecanoic acid) was tested for eye irritancy in one eye of each of three rabbits. Eye responses were scored at 1, 24, 48, and 72 hours after treatment according to the method of Draize. At 1 hour after treatment, animals showed slight redness of the conjunctivae, slight to moderate swelling and slight to moderate discharge. One animal showed slight iritis. In all animals, recovery was advanced by 48 hours after treatment and the remaining eye responses had resolved completely by 72 hours after treatment. The overall mean scores were:

Opacity: 0  
Iris: 0  
Redness: 0.67  
Edema: 0.33  

**Skin sensitization**
In this study, neodecanoic acid was examined for skin sensitization potential in the guinea pig maximization procedure of Magnusson and Kligman. A preliminary screen was carried out to determine the concentrations of test material to be used for intradermal induction, topical induction, and topical challenge. Two male and female guinea pigs were used for each test concentration. Groups of ten male and ten female guinea pigs were used for the test and a further five males and five females as controls. Induction was accomplished in two stages.  
1) Intradermal injection  
Two rows of three injections were made, one on each side of the midline in the shorn skin of the shoulder region.  
2) Topical application  
One week after the intradermal injections, the same area was clipped free from hair. A 4x4 cm patch of filter paper was soaked in a solution of the test material and placed over the injection sites and covered with an occlusive dressing. The dressing was left in place for 48 hours. The challenge procedure was carried out two weeks after topical induction. Challenge was accomplished by topical application of the test material to the flank of animals via an occluded patch. The challenge lasted 24 hours. Immediately after the challenge, and then again at 24 and 48 hours later, each animals was examined for signs of skin sensitization. At no point was there any evidence of skin sensitization produced by neodecanoic acid.
Respiratory sensitization
No applicable toxicity data. No known significant effects or critical hazards.

Germ cell mutagenicity
The test substance Versatic 10 (neodecanoic acid) was examined for its potential to induce structural chromosome aberrations in cultured human lymphocytes in both the absence and presence of a metabolic activation system (S9 mix), in compliance with OECD guideline 473. Two independent chromosome aberration tests were conducted in both the absence and presence of S9. In the absence of S9, cells were exposed to the test substance continuously for 24 or 48 hours. In the presence of the S9, cells were exposed to the test substance for 3 hours and harvested at 24 or 48 hours later. The choice for the highest concentrations scored was based on toxicity. The test substance was dissolved in DMSO.

In neither chromosome aberration assay, Versatic 10 did not induce a statistically significant increase in the percentage of cells with structural chromosome aberrations at any of the concentrations and time points analyzed. The positive controls gave appropriate responses. It is concluded that Versatic 10 is not clastogenic under the conditions used in this study.

Carcinogenicity
Justification for data waiving:
Testing for carcinogenicity does not appear scientifically necessary. The data generated in the repeated dose dermal toxicity test are adequate for the purposes of classification and labeling and indicate there is no systemic toxicity. Neocids do not bioaccumulate and are readily excreted. Neodecanoic acid does not have any structural alerts for carcinogenicity (ToxTree v1.5) and was negative in several tests that assess genetic toxicity. Additionally, neodecanoic acid has a low potential for acute toxicity.

Reproductive toxicity
This study was conducted to evaluate the effects of long-term ingestion of neodecanoic acid on reproduction in albino rats. Neodecanoic acid was administered in the diet at levels of 100, 500, and 1500 ppm fed to the rats through two parental and to two-litter filial generations. Following nine weeks of dietary administration to the F2B weanlings designated as the third parental generation, the study was terminated. There was no evidence at any test level of an adverse effect on the survival, appearance, behavior, body weight gain, and food consumption of the parental generations; on the reproductive performance of the parents reflected by the various indices; or on the growth, appearance, and behavior of the offspring. Gross and macroscopic pathological findings revealed no evidence of a compound-related effect at any of the dietary levels.

Developmental / Teratogenicity
In this study, pregnant rats, n=22 per dose, were treated by oral gavage to 50, 250, 600 or 800 mg/kg/day Neoheptanoic acid during gestation days 6-15. On gestation day 21, the dams were euthanized and the pups were examined for signs of developmental toxicity. Under the conditions of the experimental methods, the test material produced maternal toxicity at dose levels of 600 and 800 mg/kg with maternal lethality at 800 mg/kg. The test material was severely embryotoxic at 800 mg/kg with less than 20% of embryos surviving. Offspring of the 800 mg/kg group had reduced body weight, reduced crown-rump distance, displayed variations signifying delayed development, and a significant percentage (25%) were malformed. In the 600 mg/kg group, there were an increase number of dams with 3 or more resorptions. Offspring of the 600 mg/kg group displayed significant incidences of major (hydrocephalus) and minor (knobby or angular ribs, extra lumbar vertebrae) malformations but showed few signs of delayed development and were not runted.

There was no statistically significant evidence of maternal toxicity at dose levels of 50 or 250 mg/kg. There was a slight, but not statistically significant, increase in embryonic resorption noted for the 250 mg/kg group. There was no statistically significant evidence of developmental toxicity at doses for 50 or 250 mg/kg. The NOAEL for maternal toxicity is 600 mg/kg and the NOAEL for developmental toxicity is 250 mg/kg.

STOT-single exposure
No applicable toxicity data. No known significant effects or critical hazards.

STOT-repeated exposure
No classification for repeated dose toxicity is indicated according to the classification, labeling, and packaging (CLP) regulation (EC) No 1272/2008 or the general classification and labeling

Aspiration hazard
No applicable toxicity data. No known significant effects or critical hazards.

Other information
No applicable toxicity data. No known significant effects or critical hazards.

SECTION 12: Ecological information

12.1. Toxicity

neodecanoic acid

Short term: The 96-h LL50 of Versatic 10 to rainbow trout was >100 mg/L

Long term: The calculated chronic value for neodecanoic acid includes a 30-day freshwater fish value of 1.6 mg/l.

Short term: The acute toxicity of Neodecanoic acid as measured by mortality to the water flea (Daphnia magna) was evaluated in freshwater. Neodecanoic acid produced a 48 hour LC50 of 47.1 mg/L under the conditions of this study.

Long term: Based on the calculated Kow value, neodecanoic acid is expected to have Daphnia Chronic Value of 1.7 mg/L.

The 96-h EC50 for growth rate and biomass for the test material was 89 mg/L. E. coli EC50 was 88.257 using Catalogic E. coli QSAR.

12.2. Persistence and degradability

neodecanoic acid

Neodecanoic acid was not inherently biodegradable under the conditions of the study.

12.3. Bioaccumulative potential

neodecanoic acid

This study was performed to provide data to determine the Bioconcentration factor [BCF] for the test substance Neo Decanoic acid, using rainbow trout (Oncorhynchus mykiss). The study included a 14-day uptake phase and a 9-day depuration phase.

A single treatment was prepared containing the test substance and was administered to the test system via an aqueous exposure. This concentration was employed to generate the exposure solution for the uptake phase of the BCF test. Method development was performed to determine the length of time needed to approach an equilibrium concentration. A control exposure was also prepared using the dilution water in place of the test substance. During the uptake phase fish were fed daily. Fish samples were removed on Days 0 and 10 of the uptake phase and analyzed for lipid content and days 7 and 14 for test substance analysis. On Day 14 of the uptake phase, the fish were transferred to two separate post-exposed and control depuration systems.

Each depuration system was constructed to provide at least five volume replacements of water per day through each test chamber. Fish samples were collected from each tank on Days 0 and, 9 of the depuration phase and analyzed for lipid content and days 0, 1, 3, 9. During the depuration period, remaining treated and control fish were fed daily. No difference in mortality or growth rate was observed between the exposed and control treatments at the end of the study (23 days total).

Results from this study indicate a wet weight, 5 lipid-normalized Bioconcentration factor for Neodecanoic Acid of <225 L/kg.

12.4. Mobility in soil
neodecanoic acid

Estimated neo-decanoic acid Koc is 121. The Koc of neo-decanoic acid may be sensitive to pH.

12.5. Results of PBT and vPvB assessment

neodecanoic acid

The data on the properties of neodecanoic acid do not meet the specific criteria detailed in Annex XIII and demonstrate that neodecanoic acid is not a PBT or vPvB.

12.6. Other adverse effects

neodecanoic acid

No known adverse effects.

SECTION 13: Disposal considerations

The substance/product is registered with strictly controlled conditions as defined in Article 18(4) of Regulation (EC) No. 1907/2006 (REACH Regulation) and must therefore be handled as such.

Therefore, the substance must be rigorously contained by technical means during its whole lifecycle including manufacture, purification, cleaning and maintenance of equipment, sampling, analysis, loading and unloading of equipment or vessels, waste disposal or purification and storage.

Strictly controlled conditions must be achieved without the use of personal protective equipment (PPE) except for the exceptional situations. PPE can only be part of the strictly controlled conditions for:

1) Accidents and incidents that may occur despite appropriate management systems and operational procedures, and

2) Maintenance and cleaning works, providing that special procedures such as purging and washing are applied before the system is opened or entered.

13.1. Waste treatment methods

Methods of disposal : The generation of waste should be avoided or minimized wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe way. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Hazardous waste : Within the present knowledge of the supplier, this product is not regarded as hazardous waste, as defined by EU Directive 91/689/EEC.

SECTION 14: Transport information
14.1. UN number 14.2. UN proper shipping name 14.3. Transport hazard class(es) 14.4. Packing group
ADR Non-regulated
RID Non-regulated
ADN/ADNR Non-regulated
ICAO/IATA Non-regulated
IMO/IMDG Non-regulated

14.5. Environmental hazards
Environmentally hazardous and/or Marine Pollutant : No.

14.6. Special precautions for user
Not applicable.

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code
Not applicable.

SECTION 15: Regulatory information

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

EU regulations
SEVESO Directive 96/82/EC : Ingredient name neodecanoic acid Listed No.
REACH Annex XVII : Not listed
Biocides - Annex I to Directive 98/8/EC : Not listed
Prior Informed Consent. List of chemicals subject to the international PIC procedure (Part I, II, III) : None required.
Integrated pollution prevention and control list (IPPC) - Air : Not listed
Integrated pollution prevention and control list (IPPC) - Water : Not listed

Germany
Hazard class for water : WGK 2, Appendix No. 2

International regulations
**Chemical inventories**

REACH Status The substance(s) in this product has (have) been Pre-Registered and/or Registered, or are exempted from registration, according to Regulation (EC) No. 1907/2006 (REACH).

Australia inventory (AICS) This material is listed or exempted.
Canada inventory This material is listed or exempted.
Japan inventory This material is listed or exempted.
China inventory (IECSC) This material is listed or exempted.
Korea inventory This material is listed or exempted.
New Zealand Inventory (NZIoC) This material is listed or exempted.
Philippines inventory (PICCS) This material is listed or exempted.
United States inventory (TSCA 8b) This material is listed or exempted.

### 15.2. Chemical Safety Assessment

Chemical Safety Assessment not applicable.

### SECTION 16: Other information

| Full text of abbreviated H statements | : |
| Full text of classifications (CLP) | : |

The substance/product is registered with strictly controlled conditions as defined in Article 18(4) of Regulation (EC) No. 1907/2006 (REACH Regulation) and must therefore be handled as such.

**Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II**

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