SAFETY DATA SHEET

Acrawax C POWDER

SECTION 1. IDENTIFICATION

Commercial Product Name : ACRAWAX™ C POWDER
Product name : Acrawax C POWDER
Product code : 000000002289

Manufacturer or supplier's details
Company : Arch Chemicals, Inc.
1200 Bluegrass Lakes Parkway
Alpharetta, GA
30004
United States of America (USA)

E-mail address : sds@lonza.com
Emergency telephone number : In case of emergency call CHEMTREC US: 1-800-424-9300,
CHEMTREC WORLD-WIDE: +1-703-527-3887.

Recommended use of the chemical and restrictions on use
Recommended use : Lubricant

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification
Combustible dust : 

GHS label elements
Signal word : Warning
Hazard statements : May form combustible dust concentrations in air.

Other hazards
The following percentage of the mixture consists of ingredient(s) with unknown acute toxicity: 25 %

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Substance

Hazardous components

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS-No.</th>
<th>Concentration (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Octadecanamide, N,N'-1,2-ethanediylbis</td>
<td>110-30-5</td>
<td>80.00 - 98.00</td>
</tr>
<tr>
<td>Stearic acid</td>
<td>57-11-4</td>
<td>1.00 - 3.00</td>
</tr>
</tbody>
</table>

SECTION 4. FIRST AID MEASURES

If inhaled : Move to fresh air.
If unconscious, place in recovery position and seek medical advice.

In case of skin contact : Wash with water and soap as a precaution.
If on clothes, remove clothes. 
In the case of skin irritation or allergic reactions see a physician.

In case of eye contact : Flush eyes with water as a precaution. 
Remove contact lenses. 
Protect unharmed eye. 
Keep eye wide open while rinsing. 
If eye irritation persists, consult a specialist.

If swallowed : Clean mouth with water and drink afterwards plenty of water. 
Never give anything by mouth to an unconscious person. 
If symptoms persist, call a physician.

Most important symptoms and effects, both acute and delayed : No information available.

Notes to physician : Treat symptomatically.

SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media : Water spray 
Alcohol-resistant foam 
Dry chemical

Specific hazards during firefighting : Avoid generating dust; fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard. 
Heating or fire can release toxic gas.

Further information : Use water spray to cool unopened containers.

Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus. 
Use personal protective equipment.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures : Use personal protective equipment. 
Avoid dust formation.

Environmental precautions

General advice : Try to prevent the material from entering drains or water courses.

Methods and materials for containment and cleaning up : Pick up and arrange disposal without creating dust. 
Non-sparking tools should be used. 
Dust deposits should not be allowed to accumulate on surfaces, as these may form an explosive mixture if they are released into the atmosphere in sufficient concentration. 
Avoid dispersal of dust in the air (i.e., clearing dust surfaces with compressed air).

SECTION 7. HANDLING AND STORAGE
SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS-No.</th>
<th>Value type (Form of exposure)</th>
<th>Control parameters / Permissible concentration</th>
<th>Basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stearic acid</td>
<td>57-11-4</td>
<td>TWA</td>
<td>10 mg/m3</td>
<td>ACGIH</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA (Respirable fraction.)</td>
<td>3 mg/m3</td>
<td>ACGIHLIS_P</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA (Inhalable fraction.)</td>
<td>10 mg/m3</td>
<td>ACGIHLIS_P</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA</td>
<td>10 mg/m3</td>
<td>CAD ON OEL</td>
</tr>
</tbody>
</table>

Appropriate engineering controls

Engineering measures: It is recommended that all dust control equipment such as local exhaust ventilation and material transport systems involved in handling of this product contain explosion relief vents or an explosion suppression system or an oxygen deficient environment. Ensure that dust-handling systems (such as exhaust ducts, dust collectors, vessels, and processing equipment) are designed in a manner to prevent the escape of dust into the work area (i.e., there is no leakage from the equipment). Use only appropriately classified electrical equipment and powered industrial trucks.

Personal protective equipment

Respiratory protection: No personal respiratory protective equipment normally required.

Hand protection

Remarks: Wear protective gloves. Break through time: > 480 min

Eye protection: Safety glasses

Skin and body protection: Choose body protection according to the amount and concentration of the dangerous substance at the work place.

Protective measures: Risk of dust explosion. Use only in area provided with appropriate exhaust ventilation.

Hygiene measures: Handle in accordance with good industrial hygiene and safety practice.
SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : powder

Colour : light brown

Odour : fatty odour

Odour Threshold : no data available

pH : 6.5 - 7.5, (20 °C)

Melting point/range : 140 - 145 °C

Boiling point/boiling range : no data available

Flash point : 270 - 290 °C
Method: open cup

Evaporation rate : no data available

Flammability (solid, gas) : May form combustible dust concentrations in air.

Upper explosion limit : no data available

Lower explosion limit : no data available

Vapour pressure : no data available

Relative vapour density : no data available

Relative density : no data available

Density : no data available

Solubility(ies)
Water solubility : 0.01 mg/l (25 °C)

Solubility in other solvents : 12.1 g/l
(78 °C)
Solvent: Ethanol

Partition coefficient: n-octanol/water : no data available

Auto-ignition temperature : no data available

Decomposition temperature : no data available

Viscosity : no data available

Viscosity, dynamic : no data available

Viscosity, kinematic : no data available
### SECTION 10. STABILITY AND REACTIVITY

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reactivity</td>
<td>No decomposition if stored and applied as directed.</td>
</tr>
<tr>
<td>Chemical stability</td>
<td>Stable under recommended storage conditions.</td>
</tr>
<tr>
<td>Possibility of hazardous reactions</td>
<td>Stable under recommended storage conditions.</td>
</tr>
<tr>
<td></td>
<td>No hazards to be specially mentioned.</td>
</tr>
<tr>
<td>Conditions to avoid</td>
<td>Heat</td>
</tr>
<tr>
<td>Incompatible materials</td>
<td>Strong acids and strong bases</td>
</tr>
<tr>
<td></td>
<td>Oxidizing agents</td>
</tr>
<tr>
<td>Hazardous decomposition products</td>
<td>No decomposition if used as directed.</td>
</tr>
</tbody>
</table>

### SECTION 11. TOXICOLOGICAL INFORMATION

<table>
<thead>
<tr>
<th>Information on likely routes of exposure</th>
<th>Inhalation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Eyes</td>
</tr>
<tr>
<td></td>
<td>Skin</td>
</tr>
<tr>
<td></td>
<td>Ingestion</td>
</tr>
</tbody>
</table>

**Acute toxicity**

- **Acute oral toxicity (LD50)**: > 15,380 mg/kg  
  Species: Rat

- **Acute inhalation toxicity (LC50)**: > 58 mg/l  
  Species: Rat  
  Method: US-EPA

- **Acute dermal toxicity (LD50)**: > 20,000 mg/kg  
  Species: Rabbit  
  Method: US-EPA

**Skin corrosion/irritation**

- **Skin irritation**: No skin irritation  
  Species: Rabbit

**Respiratory or skin sensitisation**

- **Sensitisation**: Remarks: no data available

**Germ cell mutagenicity**

- **Genotoxicity in vitro**: negative  
  Ames test, Salmonella typhimurium

**Aspiration toxicity**

- No aspiration toxicity classification
SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity
Toxicity to fish (LC50) : > 1,000 mg/l
   Species: Oncorhynchus mykiss (rainbow trout)
   Acute toxicity
   Exposure time: 96 h
   GLP: yes

Toxicity to daphnia and other aquatic invertebrates (EC50) : 140 mg/l
   Species: Daphnia magna (Water flea)
   Immobilization
   Exposure time: 48 h

Persistence and degradability
Biodegradability : Test Type: Modified Sturm Test
   Concentration: 10 mg/l
   Result: Not readily biodegradable.
   Biodegradation: 15 %
   Exposure time: 28 d
   Method: OECD Test Guideline 301B
   GLP: yes

Bioaccumulative potential
no data available

Mobility in soil
no data available

Other adverse effects
Additional ecological information : no data available

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods
Waste from residues : Dispose of contents/container in accordance with local regulation.
   Contact waste disposal services.

Contaminated packaging : Empty containers should be taken to an approved waste handling site for recycling or disposal.
SECTION 14. TRANSPORT INFORMATION

IATA
UN number: Not applicable
Proper shipping name: Not applicable
Transport hazard class: Not applicable
Packing group: Not applicable
Environmental hazards: no

IMDG
UN number: Not applicable
Proper shipping name: Not applicable
Transport hazard class: Not applicable
Packing group: Not applicable
Environmental hazards: Marine pollutant: no

ADR
UN number: Not applicable
Proper shipping name: Not applicable
Transport hazard class: Not applicable
Packing group: Not applicable
Environmental hazards: no

RID
UN number: Not applicable
Proper shipping name: Not applicable
Transport hazard class: Not applicable
Packing group: Not applicable
Environmental hazards: no

DOT
UN number: Not applicable
Proper shipping name: Not applicable
Transport hazard class: Not applicable
Packing group: Not applicable
Environmental hazards: no
SAFETY DATA SHEET

Acrawax C POWDER
Version 1.4
SDS Number: 000000002289
Revision Date: 2018.01.08

TDG
Not dangerous goods

UN number: Not applicable
Proper shipping name: Not applicable
Transport hazard class: Not applicable
Packing group: Not applicable
Environmental hazards: no

Special precautions for user: none
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code: Not applicable

SECTION 15. REGULATORY INFORMATION

SARA 311/312 Hazards
See above: SECTION 2. Hazard Identification-GHS Classification

US State Regulations

Massachusetts Right To Know
Not listed

Pennsylvania Right To Know
No components are subject to the Pennsylvania Right to know act

New Jersey Right To Know
No components are subject to the New Jersey Right to know act

California Prop. 65
This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

SECTION 16. OTHER INFORMATION

Revision Date: 2018.01.08

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.