

SAFETY DATA SHEET

FDS Durston Safe Pickle Powder-ENG_03-2023

Revision No. 1 Date: 01/03/2023

Prepared according to Annex II of the REACH Regulation 1907/2006/EC

1 - IDENTIFICATION OF PREPARATION AND COMPANY/BUSINESS

Preparation:

Name: Durston Safe Pickle Powder

Normal use: Pickling material for Metal and Alloys

Company / Business:

Registered company name: Durston Tools (W.Durston Ltd)

Address: Park House Business Centre, Desborough Park Road,
High Wycombe, Bucks, HP123DJ UK

Telephone: +44 (0)1494 342069

E-mail: support@durston.com

2 - IDENTIFICATION OF HAZARDS

Formula: C₆H₈O₇ (Citric Acid monohydrate cryt.99% and ingredients 1%)

CAS No.: 5949-29-1

EC No.: 201-069-1

Molecular mass: 210.14g/mole

3 - INFORMATION REGARDING CONSTITUENTS

Potential Acute Health Effects:

Hazardous in case of eye contact (irritant), of inhalation (lung irritant).

Slightly hazardous in case of skin contact (irritant), of ingestion. The amount of tissue damage depends on the length of contact. Eye contact can result in corneal damage or blindness. Skin contact can produce inflammation and blistering. Severe over-exposure can produce lung damage, choking, unconsciousness or death.

Potential Chronic Health Effects:

Slightly hazardous in case of skin contact (irritant). CARCINOGENIC EFFECTS: Not available.

MUTAGENIC EFFECTS: Not available. TERATOGENIC EFFECTS: Not available.

DEVELOPMENTAL TOXICITY: Not available. The substance may be toxic to teeth. Repeated or prolonged exposure to the substance can produce target organ damage. Repeated exposure of the eyes to a low level of dust can produce eye irritation. Repeated skin exposure can produce local skin destruction or dermatitis. Repeated inhalation of dust can produce varying degrees of respiratory irritation or lung damage.

4 - FIRST AID

Eye Contact:

Check for and remove any contact lenses. In case of contact, immediately flush your eyes with plenty of water for at least 15 minutes. Cold water may be used. Get medical attention.

Skin Contact:

In case of contact, immediately flush the skin with plenty of water. Cover the irritated skin with an emollient. Remove contaminated clothing and shoes. Cold water may be used. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention.

Serious Skin Contact:

Wash with a disinfectant soap and cover the contaminated skin with an antibacterial cream. Seek medical attention.

Inhalation:

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

Serious Inhalation:

Not available.

Ingestion:

Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention if symptoms appear.

Serious Ingestion:

Not available.

5 - FIRE-FIGHTING MEASURES

Flammability of the Product:

May be combustible at high temperatures.

Auto-Ignition Temperature:

1010°C (1850°F)

Flash Points:

Not available.

Flammable Limits:

LOWER: 0.28 Kg/M3 (Dust)

UPPER: 2.29 Kg/M3 (Dust)

Products of Combustion:

These products are carbon oxides (CO, CO₂).

Fire Hazards in the Presence of Various Substances:

Slightly flammable to flammable in the presence of heat. Non-flammable in the presence of shocks.

Explosion Hazards in the Presence of Various Substances:

Slightly explosive in the presence of open flames and sparks. Non-explosive in the presence of shocks.

Fire Fighting Media and Instructions:

SMALL FIRE: Use DRY chemical powder.

LARGE FIRE: Use water spray, fog or foam. Do not use a water jet.

Special Remarks on Fire Hazards:

As with most organic solids, fire is possible at elevated temperatures.

Special Remarks on Explosion Hazards:

Fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard.

6 - MEASURES TO BE TAKEN IN THE EVENT OF ACCIDENTAL SPILLAGE**Small Spill:**

Use appropriate tools to put the spilt solid in a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of it according to local and regional authority requirements.

Large Spill:

Stop leak if without risk. Do not get water inside the container. Do not touch spilled material. Use water spray to reduce vapours. Prevent entry into sewers, basements or confined areas; dike if needed. Eliminate all ignition sources. Call for assistance on disposal. Finish cleaning by spreading water on the contaminated surface and allow it to evacuate through the sanitary system.

7 - HANDLING AND STORAGE**Precautions:**

Keep away from heat. Keep away from sources of ignition. Ground all equipment containing material. Do not ingest. Do not breathe dust. Avoid contact with eyes. Wear suitable protective clothing. In case of insufficient ventilation, wear suitable respiratory equipment. If ingested, seek medical advice immediately and show the container or the label. Keep away from incompatibles such as oxidising agents, reducing agents, metals, and alkalis.

Storage:

Keep the container tightly closed. Keep the container in a cool, well-ventilated area.

8 - EXPOSURE CONTROL - PERSONAL SAFETY

Engineering Controls:

Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

Personal Protection:

Safety glasses. Lab coat. Gloves (impervious). Dust respirator. Be sure to use an approved/certified respirator or equivalent. The dust respirator should be used for conditions where exposure has exceeded recommended exposure limits, dust is apparent, and engineering controls (adequate ventilation) are not feasible.

Personal Protection in Case of a Large Spill:

Splash goggles. Full suit. Dust respirator. Boots. Gloves. A self-contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

Exposure Limits:

No exposure guidelines have been established. ACGIH, NIOSH and OSHA have not developed exposure limits for this product. The exposure limits given below are for particulates not otherwise classified:

ACGIH: 10 mg/m³ TWA (Total Inhalable fraction); 3 mg/m³ TWA (Respirable fraction)

OSHA: 15 mg/m³ TWA (Total dust); 5 mg/m³ TWA (Respirable Fraction)

9 - PHYSICAL PROPERTIES

Physical state and appearance:

Solid. (Crystalline powder)

Odor:

Odorless.

Taste:

Acid. (Strong.)

Molecular Weight:

210.14 g/mole

Colour:

White

pH (1% soln/water):

Not available.

Boiling Point:

Decomposes.

Melting Point:

135 - 152°C

Specific Gravity:

1.54 (Water = 1)

Vapor Pressure:

<0.1 hPa at 20°C

Vapour Density:

Not available.

Volatility:

Not available.

Odor Threshold:

Not available.

Water/Oil Dist. Coeff.:

The product is more soluble in water; $\log(\text{oil/water}) = -1.7$

Ionicity (in Water):

Not available.

Dispersion Properties:

See solubility in water, diethyl ether.

Solubility:

Soluble in cold water, hot water, diethyl ether. Insoluble in benzene.

10 - STABILITY AND REACTIVITY

Stability:

The product is stable.

Instability Temperature:

Not available.

Conditions of Instability:

Excess heat, incompatible materials

Incompatibility with various substances:

Reactive with oxidising agents, reducing agents, metals, and alkalis.

Corrosivity:

Corrosive in the presence of aluminium, zinc, of copper. Non-corrosive in the presence of glass.

Special Remarks on Reactivity:

Incompatible with oxidising agents, potassium tartrate, alkali, alkaline earth carbonates and bicarbonates, acetates, sulfides, metal nitrates

Special Remarks on Corrosivity:

Will corrode copper, zinc, aluminium and their alloys.

Polymerisation:

This will not occur.

11 - TOXICOLOGICAL INFORMATION

Routes of Entry:

Inhalation. Ingestion.

Toxicity to Animals:

Acute oral toxicity (LD50): 3000 mg/kg [Rat].

Chronic Effects on Humans:

May cause damage to the following organs: teeth.

Other Toxic Effects on Humans:

Hazardous in case of inhalation (lung irritant). Slightly hazardous in case of skin contact (irritant), or ingestion.

12 - ECOLOGICAL INFORMATION**Toxicity of the Products of Biodegradation:**

The product itself and its products of degradation are not toxic.

Ecotoxicity:

Not available.

BOD5 and COD:

Not available.

13 - DISPOSAL CONSIDERATIONS**Waste Disposal:**

Waste must be disposed of in accordance with federal, state and local environmental control regulations.

14 - TRANSPORT INFORMATION**DOT Classification:**

Not a DOT-controlled material (United States).

Identification:

Not applicable.

Special Provisions for Transport:

Not applicable.

15 - STATUTORY INFORMATION**Federal and State Regulations:**

TSCA 8(b) inventory: Citric acid

Other Regulations:

EINECS: This product is on the European Inventory of Existing Commercial Chemical Substances.

CLASS E:

Corrosive solid.

R36/37/38:

Irritating to eyes, respiratory system and skin.

S26:

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S37/39:

Wear suitable gloves and eye/face protection.

16 - OTHER INFORMATION**References:**

Not available.

Other Special Considerations:

Not available.

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall ScienceLab.com be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if ScienceLab.com has been advised of the possibility of such damages.