SAFETY DATA SHEET



JOICO FREE PLAY Clay Lightener

1. Identification of the material and supplier

Names

Product name : JOICO FREE PLAY Clay Lightener

Distributor : Sabre Corporation PTY LTD

Building 8, Suite 6, level 2 / 49 Frenchs Forest Road

Forest Central Business Park Frenchs Forest, NSW, 2086

Manufacturer : Zotos International, INC

100 Tokeneke Road, Darien, CT 06820 www.zotos.com

Emergency telephone

number

: 131126

2. Hazards identification

Classification : Xn; R22

Xi; R36/37/38 R42/43

Risk phrases : R22- Harmful if swallowed.

R36/37/38- Irritating to eyes, respiratory system and skin.

R42/43- May cause sensitization by inhalation and skin contact.

Safety phrases : S2- Keep out of the reach of children.

S22- Do not breathe dust. S24- Avoid contact with skin. S37- Wear suitable gloves.

S45- In case of accident or if you feel unwell, seek medical advice immediately

(show the label where possible).

S63- In case of accident by inhalation: remove casualty to fresh air and keep at rest.

Hazard statements : CAUSES EYE AND SKIN IRRITATION. MAY BE HARMFUL IF SWALLOWED.

3. Composition/information on ingredients

Mixture : Yes.

| Ingredient name | CAS number | Concentration |
|---------------------------|------------|---------------|
| Potassium persulphate | 7727-21-1 | 30.00 |
| Silicic acid, sodium salt | 1344-09-8 | 8.91 |
| Ammonium persulphate | 7727-54-0 | 8.00 |
| magnesium carbonate | 546-93-0 | 5.00 |

Other ingredients, determined not to be hazardous according to Safe Work Australia criteria, and not dangerous according to the ADG Code, make up the product concentration to 100%.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

4. First aid measures

First aid measures

Inhalation Ingestion

- : Move affected person to fresh air. Seek immediate medical attention.
- : Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open

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4. First aid measures

airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Skin contact

: Wash contaminated skin with soap and water. If on clothes, remove clothes. Seek medical attention if irritation persists.

Eye contact

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

Protection of first-aiders

No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

Advice to doctor

: In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

5. Fire-fighting measures

Extinguishing media
Special exposure hazards

- : Use water spray or fog.
- 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. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

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.

Hazchem code : 1Y

6. Accidental release measures

Personal precautions

: Wear suitable protective clothing, gloves and eye/face protection.

Fine dust clouds may form explosive mixtures with air.

- **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).

Methods for cleaning up

: If emergency personnel are not present, sweep up small spillages, avoiding making dust and place in a suitable container for disposal. Do not mix with other wastes.

7. Handling and storage

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. Remove contaminated clothing and protective equipment before entering eating areas. Persons with a history of skin sensitization problems or asthma, allergies or chronic or recurrent respiratory disease should not be employed in any process in which this product is used. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing dust. Avoid the creation of dust when handling and avoid all possible sources of ignition (spark or flame). Prevent dust accumulation. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Electrical equipment and lighting should be protected to appropriate standards to prevent dust coming into contact with hot surfaces, sparks or other ignition sources. Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. Empty containers retain product residue and can be hazardous. Do not reuse container.

Storage

: Store in a cool, dry, well-ventilated place. Keep out of reach of children. Keep container tightly closed. Avoid shock and impact.

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8. Exposure controls/personal protection

Occupational exposure limits

| Ingredient name | Exposure limits |
|-----------------------|---|
| Potassium persulphate | Safe Work Australia (Australia, 1/2014). Skin sensitizer. TWA: 0.1 mg/m³ 8 hours. |
| Ammonium persulphate | Safe Work Australia (Australia, 1/2014). Skin sensitizer. TWA: 0.1 mg/m³ 8 hours. |
| magnesium carbonate | Safe Work Australia (Australia, 1/2014). TWA: 10 mg/m³ 8 hours. |

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 appropriate monitoring standards. Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

Exposure controls

Engineering measures
Hygiene measures

- : Use with adequate ventilation.
- : 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. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eyes

: None.

Hands

: Wear suitable gloves.

Respiratory

: Use a properly fitted, particulate filter 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.

Skin

: 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. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

9. Physical and chemical properties

Physical state : Solid. [Powder.]

Color : White.

Odor : Characteristic.

Flash point : Closed cup: Not applicable.

Flame duration : Not applicable.

10. Stability and reactivity

Chemical stability

: Unstable.

Possibility of hazardous reactions

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

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Conditions to avoid Materials to avoid : heat moisture reducing agents shocks and mechanical impacts friction

: Do not mix in metal bowl combustible materials acids alkalis

Hazardous decomposition

1

: Ammonia.

products

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11. Toxicological information

Potential acute health effects

Inhalation : Irritating to respiratory system. May cause sensitization by inhalation. Exposure to

decomposition products may cause a health hazard. Serious effects may be

delayed following exposure.

Ingestion : Harmful if swallowed. Irritating to mouth, throat and stomach.
 Skin contact : Irritating to skin. May cause sensitization by skin contact.

Eye contact: Irritating to eyes.

Acute toxicity

| Product/ingredient name | Result | Dose | Exposure |
|---------------------------|-----------|------------|----------|
| Potassium persulphate | LD50 Oral | 802 mg/kg | - |
| Silicic acid, sodium salt | LD50 Oral | 1960 mg/kg | - |
| Ammonium persulphate | LD50 Oral | 689 mg/kg | - |
| magnesium carbonate | LD50 Oral | 8000 mg/kg | - |

Conclusion/Summary: Not available.

Potential chronic health effects

Chronic toxicity

Conclusion/Summary: Not available.

Irritation/Corrosion

| Product/ingredient name | Result | Score | Exposure | Observation |
|---------------------------|------------------------|-------|----------------------------|-------------|
| Silicic acid, sodium salt | Eyes - Severe irritant | - | 24 hours 10 milligrams | - |
| | Skin - Severe irritant | - | 24 hours 500 milligrams | - |

Conclusion/Summary: Not available.

Sensitizer

Conclusion/Summary: Not available.

Carcinogenicity

Conclusion/Summary: Not available.

Mutagenicity

Conclusion/Summary: Not available.

Teratogenicity

Conclusion/Summary: Not available.

Reproductive toxicity

Conclusion/Summary: Not available.

Chronic effects : Repeated or prolonged inhalation of dust may lead to chronic respiratory irritation.

Once sensitized, a severe allergic reaction may occur when subsequently exposed

to very low levels.

Carcinogenicity : No known significant effects or critical hazards.
 Mutagenicity : No known significant effects or critical hazards.
 Teratogenicity : No known significant effects or critical hazards.
 Developmental effects : No known significant effects or critical hazards.
 Fertility effects : No known significant effects or critical hazards.

Over-exposure signs/symptoms

Inhalation : Adverse symptoms may include the following:

respiratory tract irritation

coughing

wheezing and breathing difficulties

asthma

Ingestion: No specific data.

Skin : Adverse symptoms may include the following:

irritation redness

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11. Toxicological information

Eyes

: Adverse symptoms may include the following:

irritation watering redness

Target organs

: Contains material which may cause damage to the following organs: upper respiratory tract, skin, eyes, testes.

12. Ecological information

THE FOLLOWING DATA IN THIS SECTION IS SOURCED FROM PUBLICLY AVAILABLE DATABASES AND NOT THE REPRESENTATION OF ANY DATA COLLECTED BY ZOTOS INTERNATIONAL OR ITS AFFILIATES.

Ecotoxicity

: No known significant effects or critical hazards.

Aquatic ecotoxicity

| Product/ingredient name | Result | Species | Exposure |
|---------------------------|---|--|----------------------------------|
| Potassium persulphate | Acute EC50 2.88 mg/dm3 Fresh water | Algae - Pseudokirchneriella subcapitata | 72 hours |
| | Acute LC50 1175000 μg/l Acute LC50 92000 μg/l | Crustaceans - Cyclops strenuus Daphnia - Daphnia magna | 48 hours 48 hours |
| Silicic acid, sodium salt | Acute EC50 0.4 mg/l Fresh water | Crustaceans - Ceriodaphnia dubia - Neonate | 48 hours |
| Ammonium persulphate | Acute LC50 494000 μg/l Fresh water Acute LC50 170000 μg/l Acute LC50 87000 μg/l | Daphnia - Daphnia magna Crustaceans - Cyclops strenuus Daphnia - Daphnia pulicaria | 48 hours 48 hours 48 hours |

Conclusion/Summary

: Not available.

Other ecological information

Persistence/degradability

Conclusion/Summary: Not available.

Other adverse effects : No known significant effects or critical hazards.

13. Disposal considerations

Methods of disposal : Dispose of according to all federal, state and local applicable regulations.

14. Transport information

| Regulation | UN number | Proper shipping name | Classes | PG* | Label | Additional information |
|------------|-----------|-------------------------|---------|-----|---|---|
| ADG | UN1479 | OXIDIZING SOLID, N.O.S. | 5.1 | III | OXIDIZING | Hazchem code 1Y |
| | | | | | 4.7 | Special provisions 223, 274 |
| ADR | UN1479 | OXIDIZING SOLID, N.O.S. | 5.1 | III | *************************************** | The environmentally hazardous substance mark is not required when transported in sizes of ≤5 L or ≤5 kg. Hazard identification number 50 Limited quantity LQ12 Special provisions 274 Tunnel code (E) |

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14. Transport information

| | 1 | | Į. | | l | |
|------|--------|--|-----|-----|-----|--|
| IMDG | UN1479 | OXIDIZING SOLID, N.O.S Marine pollutant (dipotassium peroxodisulphate, Silicic acid, sodium salt) | 5.1 | III | ¥22 | The marine pollutant mark is not required when transported in sizes of ≤5 L or ≤5 kg. Emergency schedules (EmS) F-A, S-Q Special provisions 223, 274, 900 |
| IATA | UN1479 | Oxidizing solid, n.o.s. | 5.1 | 111 | Y | The environmentally hazardous substance mark may appear if required by other transportation regulations. Passenger and Cargo Aircraft Quantity limitation: 25 kg Packaging instructions: 516 Cargo Aircraft Only Quantity limitation: 100 kg Packaging instructions: 518 Limited Quantities - Passenger Aircraft Quantity limitation: 10 kg Packaging instructions: Y516 Special provisions A3 |

PG*: Packing group

15. Regulatory information

Standard Uniform Schedule of Medicine and Poisons

Not regulated.

Control of Scheduled Carcinogenic Substances

Control of Confedence Caronic going Cabotaneous

Australia inventory (AICS) : All ingredients that are not contained in the AICS database are below registration thresholds.

16. Other information

Date of issue : 1/24/2018

Disclaimer

To the best of our knowledge, the information contained herein is accurate. However, neither the abovenamed supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

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