

Material Safety Data Sheet

1. Identification of the material and supplier

Names

Product name : GREY COLOR - INTERPON PZ 550
Product code : ALZ55V
Trade name : ALZ55V
ADG : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Zinc powder - zinc dust (stabilized), zinc oxide)
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 For Poisons Advice telephone 131 126 For Advice to Doctors & Hospitals only

Uses

Area of application : Industrial applications.
Material uses : Electrostatic coating for use in industrial plants
Product type : Powder.

2. Hazards identification

Classification : N; R50/53
Risk phrases : R50/53- Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
Safety phrases : S61- Avoid release to the environment. Refer to special instructions/safety data sheet.
Statement of hazardous/ dangerous nature : NON-HAZARDOUS SUBSTANCE. DANGEROUS GOODS.

3. Composition/information on ingredients

Mixture : Yes.

Ingredient name	CAS number	Concentration
Zinc powder zinc dust (stabilized)	7440-66-6	25 - 75
Zinc oxide	1314-13-2	2.5 - 10

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** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. 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.
- Ingestion** : 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 if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
- Skin contact** : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- 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.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.
- 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

- Suitable** : Use dry chemical powder.
- Not suitable** : Do not use water jet.
- Special exposure hazards** : 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. This material is very toxic to aquatic organisms. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.
Fine dust clouds may form explosive mixtures with air.
- Hazardous thermal decomposition products** : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
nitrogen oxides
metal oxide/oxides
- 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.

6. Accidental release measures

- Personal precautions** : 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. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing dust. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see Section 8).
- 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). Water polluting material. May be harmful to the environment if released in large quantities.

Methods for cleaning up

- Small spill** : Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Vacuum or sweep up material and place in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor.
- Large spill** : Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. Avoid creating dusty conditions and prevent wind dispersal. Prevent entry into sewers, water courses, basements or confined areas. Vacuum or sweep up material and place in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

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. Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing dust. Avoid release to the environment. Refer to special instructions/ safety data sheet. 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 accordance with local regulations. Store in a segregated and approved area. 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. Eliminate all ignition sources. Separate from oxidizing materials. 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.

8. Exposure controls/personal protection

Occupational exposure limits

Ingredient name	Exposure limits
Zinc oxide	Safe Work Australia (Australia, 1/2014). TWA: 10 mg/m ³ 8 hours. Form: Dust STEL: 10 mg/m ³ 15 minutes. Form: Fume TWA: 5 mg/m ³ 8 hours. Form: Fume

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** : Use only with adequate ventilation. If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.
- 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.
- Eyes** : 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 or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields. If operating conditions cause high dust concentrations to be produced, use dust goggles.
- Hands** : 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. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
- 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.]
Odor	: Odorless.
Relative density	: 1.2 to 1.9 [ISO 8130-2/-3]
Density	: 0.4 to 1 g/cm ³ [23°C (73.4°F)]
Flash point	: Closed cup: Not applicable.
Flammable limits	: 20 - 70 g/m ³
Auto-ignition temperature	: 450 to 600°C (842 to 1112°F)
Solubility	: Insoluble in the following materials: cold water and hot water.
Minimum ignition energy (mJ)	: 5 to 20

In operations where the powder is recovered for reuse, the average particle size may change and this in turn can lead to an alteration in MIE.

10. Stability and reactivity

Chemical stability	: The product is stable.
Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	: Avoid the creation of dust when handling and avoid all possible sources of ignition (spark or flame). 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. Prevent dust accumulation.
Materials to avoid	: Reactive or incompatible with the following materials: oxidizing materials
Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

11. Toxicological information

Potential acute health effects

Inhalation	: Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the nose, throat and lungs. Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.
Ingestion	: No known significant effects or critical hazards.
Skin contact	: No known significant effects or critical hazards.
Eye contact	: Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the eyes.

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Zinc powder zinc dust (stabilized)	LC50 Inhalation Dusts and mists	Rat - Male, Female	5.41 mg/l	4 hours
	LD50 Oral	Rat - Male, Female	>5000 mg/kg	-

Conclusion/Summary : Not available.

Potential chronic health effects

Chronic toxicity

Conclusion/Summary : Not available.

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Zinc powder zinc dust (stabilized)	Eyes - Mild irritant	Rabbit	-	-	-
Zinc oxide	Eyes - Mild irritant	Rabbit	-	-	-

Conclusion/Summary : Not available.

Sensitizer

Product/ingredient name	Route of exposure	Species	Result
Zinc oxide	skin	Guinea pig	Not sensitizing

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.

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

Ingestion : No specific data.

Skin : No specific data.

Eyes : Adverse symptoms may include the following:
irritation
redness

Target organs : Contains material which may cause damage to the following organs: upper respiratory tract.

12. Ecological information

Ecotoxicity : Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Aquatic ecotoxicity

Product/ingredient name	Result	Species	Exposure
Zinc powder zinc dust (stabilized)	Acute EC50 0.15 mg/l Fresh water	Algae - Pseudokirchneriella subcapitata	72 hours
	Acute EC50 0.155 mg/l Fresh water	Daphnia - Ceriodaphnia dubia	48 hours
Zinc oxide	Acute LC50 0.439 mg/l Fresh water	Fish - Cottus bairdii	96 hours
	Chronic NOEC 0.05 mg/l Fresh water	Algae - Pseudokirchneriella subcapitata	72 hours
	Chronic NOEC 0.025 mg/l Fresh water	Daphnia - Ceriodaphnia dubia	7 days
	Chronic NOEC 0.169 mg/l Fresh water	Fish - Cottus bairdii	30 days
	Acute EC50 24.6 mg/l	Daphnia - Daphnia magna	48 hours
	Acute IC50 0.17 mg/l	Algae - Selenastrum capricornutum	72 hours
	Acute LC50 1.1 mg/l	Fish - Oncorhynchus Mykiss	96 hours

Conclusion/Summary : Not available.

Other ecological information

Persistence/degradability

Conclusion/Summary : Not available.

Bioaccumulative potential



Product/ingredient name	LogP _{ow}	BCF	Potential
Zinc oxide	-	60960	high







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

13. Disposal considerations

Methods of disposal : The generation of waste should be avoided or minimized wherever possible. 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. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

14. Transport information

Regulation	UN number	Proper shipping name	Classes	PG*	Label	Additional information
ADG	UN3077	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N. O.S. (Zinc powder - zinc dust (stabilized), zinc oxide)	9	III	 	The product is not regulated as a dangerous good when transported by road or rail in either an IBC, or in other container types if ≤500 kg. The environmentally hazardous substance mark is not required when transported in sizes of ≤5 L or ≤5 kg.

ADR	UN3077	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N. O.S. (Zinc powder - zinc dust (stabilized), zinc oxide)	9	III	 	<p>This product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8.</p> <p>Tunnel code (-)</p>
IMDG	UN3077	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N. O.S. (Zinc powder - zinc dust (stabilized), zinc oxide). Marine pollutant	9	III	 	<p>This product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8.</p> <p>IMDG Code Segregation group 7 - Heavy metals and their salts (including their organometallic compounds) 15 - Powdered metals</p>
IATA	UN3077	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N. O.S. (Zinc powder - zinc dust (stabilized), zinc oxide)	9	III	 	<p>This product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of 5.0.2.4.1, 5.0.2.6.1.1 and 5.0.2.8.</p>

PG* : Packing group

15. Regulatory information

Standard Uniform Schedule of Medicine and Poisons

Not regulated.

Model Work Health and Safety Regulations - Scheduled Carcinogens

No listed substance

Australia inventory (AICS) : All components are listed or exempted.

EU Classification : N; R50/53

HCS Classification : Target organ effects

16. Other information

Person who prepared the MSDS : Validated by Company on 4/1/2021.

Date of previous issue : No previous validation.

✔ Indicates information that has changed from previously issued version.

Disclaimer

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named 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.