



# Material Safety Data Sheet

## Duraphos 642

### **MANUFACTURER:**

**German Metal Surface Treatment Chemicals Co. (SUGEST)**

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### **1. Product and Company Identification**

**NAME** Duraphos 642  
**USE** Used as zinc phosphating chemicals.  
**LABEL** Duraphos 642  
**Company** German Metal Surface Treatment Chemicals Co.

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### **2. Description:**

**Duraphos 642** is a nitrite accelerated Di-cationic zinc phosphating product.

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### **3. Chemical Composition**

<b>Ingredient</b>	<b>CAS No</b>	<b>Percent by weight</b>
Zinc Oxide	1314-13-2	8 - 12
Phosphoric acid	7664-38-2	50 - 60

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### **4. Application**

**Duraphos 642** is a specially formulated product most suitable for steel, zinc substrates.

**Duraphos 642** is made for dip and spray application.

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### **5. Physical & Chemical Properties**

Appearance Liquid  
Color Green.  
PH (1%) at 25°C 2.4 ± 0.2  
Sp gr. @ 25°C 1.4 ± 0.05  
Total Acid point for (1%) 8.0 ± 0.3  
Free Acid point for (1%) 1.7 ± 0.2



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## 6. Hazards Identification

This product is an irritant to eye and skin (corrosive, Harmful)

### Emergency Overview

Chemical material cause irritant to eye and skin at concentrated liquid

### Potential Health Effects

#### Inhalation:

Harmful or fatal if swelled.

#### Skin Contact:

Irritant will cause permanent skin damage, may cause sensitization by skin contact,

#### Eye Contact:

Cause irritation and pain. Contact may cause tissue eye damage.

#### Chronic Exposure:

Not available.

## 7. First Aid Measures

### Eye Contact:

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

### Skin Contact:

In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Cover the irritated skin with an emollient. Wash clothing before reuse, clean shoes before reuse. Get medical attention immediately.

### Inhalation:

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

### 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.

## 8. Fire Fighting Measures

### Fire:

This product is non – combustible

### Explosion:

Not considered to be an explosion hazard. At low concentration

### Fire Extinguishing Media:

Use any means suitable for extinguishing surrounding fire.(flood with water ).

### Special information:

In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full face piece operated in the pressure demand or other positive pressure mode.

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## 9. Accidental Release Measures

### A- Release note:

Dilute with large volume of water

### B- Environmental precaution

Residual **Duraphos 642** are transferred to new empty can for the second use under restricted condition.

## 10. Storage Information

<b>Storage &amp; Handling</b>	Keep container tightly closed. Keep container in a cool, well-ventilated area. Do not expose to direct sun. Stable nonflammable product. Avoid store near alkaline, alcoholic, reducing materials Store in temperature not above 40°C. Observe all warnings and precautions listed for the product. <b>Duraphos 642</b> is stored only in vented containers and transferred only in a prescribed manner and never return unused <b>Duraphos 642</b> to original container, empty drums should be triple rinsed with water before discarding
<b>Shelf Life</b>	Two years from date of production if stored in normal condition.

## 11. Exposure Controls/Personal Protection

Exposure control avoid eye and skin contact.

Personal protection wears gloves, goggles and overalls when handling the material.

### Ventilation System:

A system of local and/or general exhaust is recommended to keep employee exposures below the Airborne Exposure Limits. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. Please refer to the ACGIH document, *Industrial Ventilation, a Manual of Recommended Practices*, most recent edition, for details.

### Skin Protection:

Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact. (Neoprene, polyvinyl chloride).

### Eye Protection:

Use chemical safety goggles and/or full face shield where dusting or splashing of solutions is possible. Maintain eye wash fountain and quick-drench facilities in work area.

## 12. Stability and Reactivity

### Stability:

Stable at normal condition.

### Reactivity Data

STABILITY: Stable under normal conditions

**Hazardous Polymerization:** will not occur

Avoid mix with alkaline and ammonia.



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## 13. Disposal Considerations

Disposal method: Undiluted product is regulated under environmental and transportation laws as corrosive and harmful. Disposal of according to all laws ,local and global authorities for restrictions on disposal of chemical waste, manage chemical, waste through an approved waste treatment facility , do not reuse empty container ,rinse empty container with water before discarding , container in accordance with current local community codes please recycle empty container whenever possible.

## 14. Transport information

Non Hazardous.

## 15. Other Information

### Label Hazard Warning:

WARNING! HARMFUL IF SWALLOWED OR INHALED.

### Label Precautions:

Avoid contact with eyes, skin and clothing.  
Avoid breathing fume.  
Keep container closed.  
Use only with adequate ventilation.  
Wash thoroughly after handling.

### Label First Aid:

If swallowed, induce vomiting immediately as directed by medical personnel. Give milk or water. If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. In case of contact, wipe off excess material from skin then immediately flush eyes or skin with plenty of water for at least 15 minutes. Remove contaminated clothing and shoes. Wash clothing before reuse. In all cases, get medical attention.

## 16. Packing Type:

**Duraphos 642** is packed in HDPE containers, with outer sealed ventilated cap

**Duraphos 642** is available in standard as 35 Kg can.

*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.*