

# SAFETY DATA SHEET



## Corro-Coat PE Series 53 (D002)

### Section 1. Identification

**Product name** : Corro-Coat PE Series 53 (D002)

**Standard Name ID** : 16352

**Product type** : Powder coating.

**Relevant identified uses of the substance or mixture and uses advised against**

**Identified uses**

Use in coatings - Industrial use

**Supplier's details** : 佐敦涂料（张家港）有限公司  
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### Section 2. Hazards identification

**Classification of the substance or mixture** : SKIN CORROSION/IRRITATION - Category 3  
SERIOUS EYE DAMAGE/EYE IRRITATION - Category 1  
SKIN SENSITISATION - Category 1  
REPRODUCTIVE TOXICITY (Fertility) - Category 1B  
REPRODUCTIVE TOXICITY (Unborn child) - Category 1B  
SHORT-TERM (ACUTE) AQUATIC HAZARD - Category 3  
LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 3

**GHS label elements**

**Hazard pictograms**



**Signal word** : Danger.

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## Section 2. Hazards identification

- Hazard statements** : H318 - Causes serious eye damage.  
H316 - Causes mild skin irritation.  
H317 - May cause an allergic skin reaction.  
H360 - May damage fertility or the unborn child.  
H412 - Harmful to aquatic life with long lasting effects.
- Precautionary statements**
- Prevention** : P201 - Obtain special instructions before use.  
P202 - Do not handle until all safety precautions have been read and understood.  
P280 - Wear protective gloves. Wear eye or face protection. Wear protective clothing.  
P273 - Avoid release to the environment.
- Response** : P308 + P313 - IF exposed or concerned: Get medical attention.  
P302 + P352 - IF ON SKIN: Wash with plenty of soap and water.  
P333 + P313 - If skin irritation or rash occurs: Get medical attention.  
P305 + P351 + P338 + P310 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or physician.
- Storage** : P405 - Store locked up.
- Disposal** : P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.

## Section 3. Composition/information on ingredients

- Substance/mixture** : Mixture
- Other means of identification** : Not available.
- CAS number/other identifiers**
- CAS number** : Not applicable.
- EC number** : Mixture.
- Product code** : 16352

| Ingredient name   | %    | CAS number |
|---|------|------------|
| Reaction mass of bis(2,3-epoxypropyl) terephthalate (CAS 7195-44-0) and tris(oxiranylmethyl) benzene-1,2,4-tricarboxylate (CAS 7237-83-4) | <10  | 7195-44-0  |
| 2-ethyl-N,N-bis(2-ethylhexyl)hexylamine   | ≤0.3 | 1860-26-0  |
| hydroquinone, tert-butyl-   | ≤0.3 | 1948-33-0  |
| tetradonium bromide   | <0.1 | 1119-97-7  |

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.

Occupational exposure limits, if available, are listed in Section 8.

## Section 4. First aid measures

### Description of necessary first aid measures

- Eye contact** : Get medical attention immediately. Call a poison center or physician. 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. Chemical burns must be treated promptly by a physician.
- Inhalation** : Get medical attention immediately. Call a poison center or physician. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. 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. 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.

## Section 4. First aid measures

- Skin contact** : Get medical attention immediately. Call a poison center or physician. Wash with plenty of soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Ingestion** : Get medical attention immediately. Call a poison center or physician. 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. Chemical burns must be treated promptly by a physician. 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.

### Most important symptoms/effects, acute and delayed

#### Potential acute health effects

- Eye contact** : Causes serious eye damage.
- Inhalation** : No known significant effects or critical hazards.
- Skin contact** : Causes mild skin irritation. May cause an allergic skin reaction.
- Ingestion** : No known significant effects or critical hazards.

#### Over-exposure signs/symptoms

- Eye contact** : Adverse symptoms may include the following:  
pain  
watering  
redness
- Inhalation** : Adverse symptoms may include the following:  
reduced foetal weight  
increase in foetal deaths  
skeletal malformations
- Skin contact** : Adverse symptoms may include the following:  
pain or irritation  
redness  
blistering may occur  
reduced foetal weight  
increase in foetal deaths  
skeletal malformations
- Ingestion** : Adverse symptoms may include the following:  
stomach pains  
reduced foetal weight  
increase in foetal deaths  
skeletal malformations

### Indication of immediate medical attention and special treatment needed, if necessary

- Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- Specific treatments** : No specific treatment.
- 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.

See toxicological information (Section 11)

## Section 5. Firefighting measures

### Extinguishing media

- Suitable extinguishing media** : Use an extinguishing agent suitable for the surrounding fire.
- Unsuitable extinguishing media** : None known.
- Specific hazards arising from the chemical** : This material is harmful to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.
- Hazardous thermal decomposition products** : No specific data.
- Special protective actions for fire-fighters** : 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.
- 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.
- Fire/explosion hazards** : Fine dust clouds may form explosive mixtures with air.

## Section 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel** : 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 spilt material. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
- For emergency responders** : If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
- Environmental precautions** : Avoid dispersal of spilt 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 and material for containment and cleaning up

- Small spill** : Move containers from spill area. Avoid dust generation. Do not dry sweep. Vacuum dust with equipment fitted with a HEPA filter and place in a closed, labeled waste container. Place spilled material in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor.
- Large spill** : Move containers from spill area. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Avoid dust generation. Do not dry sweep. Vacuum dust with equipment fitted with a HEPA filter and place in a closed, 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.

## Section 7. Handling and storage

- Precautions for safe handling** : 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. See also Section 8 for additional information on hygiene measures.
- Conditions for safe storage, including any incompatibilities** : Store in accordance with local regulations. 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. Store locked up. 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 unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

## Section 7. Handling and storage

See Technical Data Sheet / packaging for further information.

## Section 8. Exposure controls/personal protection

### Control parameters

#### Occupational exposure limits

Dust Limit : 10 mg/m<sup>3</sup> (TWA of total inhalable dust) and 4 mg/m<sup>3</sup> (TWA of respirable)

**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.

**Appropriate engineering controls** : If user operations generate dust, fumes, gas, vapour 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.

**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.

### Individual protection measures

**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. 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.

**Eye protection** : Safety eyewear complying to EN 166 should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles and/or face shield. If inhalation hazards exist, a full-face respirator may be required instead.

### Skin protection

**Hand protection** : 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.

There is no one glove material or combination of materials that will give unlimited resistance to any individual or combination of chemicals.

The breakthrough time must be greater than the end use time of the product.

The instructions and information provided by the glove manufacturer on use, storage, maintenance and replacement must be followed.

Gloves should be replaced regularly and if there is any sign of damage to the glove material.

Always ensure that gloves are free from defects and that they are stored and used correctly.

The performance or effectiveness of the glove may be reduced by physical/chemical damage and poor maintenance.

Barrier creams may help to protect the exposed areas of the skin but should not be applied once exposure has occurred.

**Body protection** : 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.

**Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

## Section 8. Exposure controls/personal protection

**Respiratory protection** : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

## Section 9. Physical and chemical properties

### Appearance

**Physical state** : Solid. Powder.  
**Colour** : Various  
**Odour** : Odourless.  
**Odour threshold** : Not available.  
**pH** : Not applicable.  
**Melting point** : Not applicable.  
**Boiling point** : Not available.  
**Flash point** : Not available.  
**Burning time** : Not available.  
**Burning rate** : Not available.  
**Evaporation rate** : Not available.  
**Flammability (solid, gas)** : Not applicable.  
**Minimum ignition energy (mJ)** : 10 - 30  
**Lower explosion limit** : 30 g/m<sup>3</sup>  
**Vapour pressure** : Not available.  
**Vapour density** : Not available.  
**Relative density** : 1.2 to 1.9 g/cm<sup>3</sup>  
**Solubility** : Not available.  
**Partition coefficient: n-octanol/water** : Not available.  
**Auto-ignition temperature** : > 450°C  
**Decomposition temperature** : >230°C (>446°F)  
**SADT** : Not available.  
**Viscosity** : Not applicable.

## Section 10. Stability and reactivity

**Reactivity** : No specific test data related to reactivity available for this product or its ingredients.  
**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** : No specific data.  
**Incompatible materials** : Not applicable.  
**Hazardous decomposition products** : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Fine dust clouds may form explosive mixtures with air.

## Section 11. Toxicological information

### Information on toxicological effects

#### Acute toxicity

| Product/ingredient name                      | Result    | Species | Dose       | Exposure |
|--|-----------|---------|------------|----------|
| hydroquinone, tert-butyl-tetradonium bromide | LD50 Oral | Rat     | 700 mg/kg  | -        |
|  | LD50 Oral | Rat     | 3900 mg/kg | -        |

#### Irritation/Corrosion

| Product/ingredient name                      | Result               | Species                      | Score | Exposure | Observation |
|--|----------------------|------------------------------|-------|----------|-------------|
| hydroquinone, tert-butyl-tetradonium bromide | Skin - Mild irritant | Mammal - species unspecified | -     | -        | -           |
|  | Eyes - Mild irritant | Mammal - species unspecified | -     | -        | -           |
|  | Eyes - Irritant      | Mammal - species unspecified | -     | -        | -           |
|  | Skin - Mild irritant | Mammal - species unspecified | -     | -        | -           |

#### Sensitisation

| Product/ingredient name   | Route of exposure | Species                      | Result      |
|---------------------------|-------------------|------------------------------|-------------|
| hydroquinone, tert-butyl- | skin              | Mammal - species unspecified | Sensitising |

#### Mutagenicity

Not available.

#### Carcinogenicity

Not available.

#### Reproductive toxicity

Not available.

#### Teratogenicity

Not available.

#### Specific target organ toxicity (single exposure)

| Name                | Category   | Route of exposure | Target organs                |
|---------------------|------------|-------------------|------------------------------|
| tetradonium bromide | Category 3 | Not applicable.   | Respiratory tract irritation |

#### Specific target organ toxicity (repeated exposure)

| Name   | Category   | Route of exposure | Target organs       |
|--|------------|-------------------|---------------------|
| Reaction mass of bis(2,3-epoxypropyl) terephthalate (CAS 7195-44-0) and tris(oxiranylmethyl) benzene- 1,2,4-tricarboxylate (CAS 7237-83-4) | Category 2 | Oral              | reproductive organs |
| 2-ethyl-N,N-bis(2-ethylhexyl)hexylamine  | Category 2 | Not determined    | Not determined      |

#### Aspiration hazard

Not available.

**Information on likely routes of exposure** : Not available.

#### Potential acute health effects

**Eye contact** : Causes serious eye damage.

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## Section 11. Toxicological information

- Inhalation** : No known significant effects or critical hazards.
- Skin contact** : Causes mild skin irritation. May cause an allergic skin reaction.
- Ingestion** : No known significant effects or critical hazards.

### Symptoms related to the physical, chemical and toxicological characteristics

- Eye contact** : Adverse symptoms may include the following:  
pain  
watering  
redness
- Inhalation** : Adverse symptoms may include the following:  
reduced foetal weight  
increase in foetal deaths  
skeletal malformations
- Skin contact** : Adverse symptoms may include the following:  
pain or irritation  
redness  
blistering may occur  
reduced foetal weight  
increase in foetal deaths  
skeletal malformations
- Ingestion** : Adverse symptoms may include the following:  
stomach pains  
reduced foetal weight  
increase in foetal deaths  
skeletal malformations

### Delayed and immediate effects as well as chronic effects from short and long-term exposure

#### Short term exposure

- Potential immediate effects** : Not available.
- Potential delayed effects** : Not available.

#### Long term exposure

- Potential immediate effects** : Not available.
- Potential delayed effects** : Not available.

#### Potential chronic health effects

Not available.

- General** : 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** : May damage the unborn child.
- Developmental effects** : No known significant effects or critical hazards.
- Fertility effects** : May damage fertility.

### Numerical measures of toxicity

#### Acute toxicity estimates

| Route | ATE value  |
|-------|------------|
| Oral  | 6875 mg/kg |



## Section 12. Ecological information

### Toxicity

| Product/ingredient name   | Result                                       | Species              | Exposure             |
|---------------------------|--|----------------------|----------------------|
| hydroquinone, tert-butyl- | Acute EC50 1 mg/l<br>Acute LC50 3.2 mg/l     | Crustaceans<br>Algae | 48 hours<br>96 hours |
| tetradonium bromide       | Acute LC50 0.6 mg/l<br>Acute EC50 0.022 mg/l | Fish<br>Daphnia      | 96 hours<br>48 hours |

### Persistence/degradability

Not available.

### Bioaccumulative potential

| Product/ingredient name                  | LogP <sub>ow</sub> | BCF        | Potential |
|--|--------------------|------------|-----------|
| 2-ethyl-N,N-bis(2-ethylhexyl) hexylamine | 10.131             | -          | high      |
| tetradonium bromide                      | -                  | 444 to 677 | high      |

### Mobility in soil

Soil/water partition coefficient (K<sub>oc</sub>) : Not available.

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

## Section 13. Disposal considerations

**Disposal methods** : The generation of waste should be avoided or minimised 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 spilt material and runoff and contact with soil, waterways, drains and sewers.

## Section 14. Transport information

**Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

|                            | UN             | IMDG           | IATA           |
|----------------------------|----------------|----------------|----------------|
| UN number                  | Not regulated. | Not regulated. | Not regulated. |
| UN proper shipping name    | -              | -              | -              |
| Transport hazard class(es) | -              | -              | -              |
| Packing group              | -              | -              | -              |
| Environmental hazards      | No.            | No.            | No.            |

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## Section 14. Transport information

|                                     |   |   |   |
|-------------------------------------|---|---|---|
| <b>Special precautions for user</b> | <b>Transport within user's premises:</b> always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage. | <b>Transport within user's premises:</b> always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage. | <b>Transport within user's premises:</b> always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage. |
| <b>Additional information</b>       | -   | -   | -   |

## Section 15. Regulatory information

**Safety, health and environmental regulations specific for the product:**

### Law of the People's Republic of China on the Prevention and Control of Occupational Diseases

Regulations on the Control over Safety of Dangerous Chemicals

Measures for Environmental Management of New Chemical Substances

Law of the People's Republic of China on the Prevention and Control of Environment Pollution Caused by Solid Wastes

Safety regulations for the use of chemicals in the workplace

General Rule for Classification and Hazard Communication of Chemicals

Classification and code of dangerous goods

### List of Goods banned for Importing

None of the components are listed.

### List of Goods banned for Exporting

None of the components are listed.

### List of Toxic Chemicals Severely Restricted for Importing & Exporting by China

None of the components are listed.

## Section 16. Other information

### History

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**Key to abbreviations** :

- ADN = European Provisions concerning the International Carriage of Dangerous Goods by Inland Waterway
- ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road
- ATE = Acute Toxicity Estimate
- BCF = Bioconcentration Factor
- GHS = Globally Harmonized System of Classification and Labelling of Chemicals
- IATA = International Air Transport Association
- IBC = Intermediate Bulk Container
- IMDG = International Maritime Dangerous Goods
- LogPow = logarithm of the octanol/water partition coefficient
- MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
- RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail
- UN = United Nations

### Notice to reader

The information in this document is given to the best of Jotun's knowledge, based on laboratory testing and practical experience. Jotun's products are considered as semi-finished goods and as such, products are often used under conditions beyond Jotun's control. Jotun cannot guarantee anything but the quality of the product itself. Minor product variations may be implemented in order to comply with local requirements. Jotun reserves the right to change the given data without further notice.

Users should always consult Jotun for specific guidance on the general suitability of this product for their needs and specific application practices.

**Date of issue** : 13.01.2020

## Section 16. Other information

If there is any inconsistency between different language issues of this document, the English (United Kingdom) version will prevail.