

# SAFETY DATA SHEET



Date of issue 27 February 2024

Version 1.01

## Section 1. Identification

**Chemical name** : AMERCOAT 1202 HARDENER

**GHS product identifier** : AMERCOAT 1202 HARDENER

**Code** : 00472049

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

**Product use** : Coating.  
Professional applications, Used by spraying.

**Supplier's details** : PPG Industries International Inc. Taiwan Branch.  
No.209, Hong Tzuenn Rd Ping Chen City, Taoyuan County, Taiwan  
Tel: 886 3 3663922  
886 3 3751639 (Automotive OEM Coatings Products).  
Fax: 886 3 2182667

**Emergency telephone number** : North: +886-3-3663922  
North : +886-911998320  
South: +886-7-8718105  
South : +886-932793707

## Section 2. Hazards identification

**Classification of the substance or mixture** : ACUTE TOXICITY (oral) - Category 5  
ACUTE TOXICITY (dermal) - Category 4  
SKIN CORROSION/IRRITATION - Category 1A  
SERIOUS EYE DAMAGE/EYE IRRITATION - Category 1  
SKIN SENSITISATION - Category 1  
AQUATIC TOXICITY (CHRONIC) - Category 3  
Percentage of the mixture consisting of ingredient(s) of unknown acute oral toxicity: 20.3%  
Percentage of the mixture consisting of ingredient(s) of unknown acute dermal toxicity: 61.4%  
Percentage of the mixture consisting of ingredient(s) of unknown hazards to the aquatic environment: 27.2%

### GHS label elements

**Hazard pictograms** :



**Signal word** : Danger

## Section 2. Hazards identification

- Hazard statements** : May be harmful if swallowed.  
Harmful in contact with skin.  
Causes severe skin burns and eye damage.  
May cause an allergic skin reaction.  
Harmful to aquatic life with long lasting effects.
- Precautionary statements**
- Prevention** : Wear protective gloves, protective clothing and eye or face protection. Avoid release to the environment. Avoid breathing vapour. Wash thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace.
- Response** : IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or doctor. IF SWALLOWED: Immediately call a POISON CENTER or doctor. Rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. Immediately call a POISON CENTER or doctor. Wash contaminated clothing before reuse. IF ON SKIN: Call a POISON CENTER or doctor if you feel unwell. Wash with plenty of water. If skin irritation or rash occurs: Get medical advice or attention. 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 doctor.
- Storage** : Store locked up.
- Disposal** : Dispose of contents and container in accordance with all local, regional, national and international regulations.
- Other hazards which do not result in classification** : None known.

## Section 3. Composition/information on ingredients

**Substance/mixture** : Mixture

Hazardous ingredients	Concentration %	CAS number
Cashew, nutshell liq., 2-hydroxyethyl ethers	10 - <20	232268-65-4
benzyl alcohol	5 - <10	100-51-6
1,3-Cyclohexanedimethanamine	5 - <10	2579-20-6
4,4'-methylenebis(cyclohexylamine)	3 - <5	1761-71-3
Cyclohexanamine, 4,4'-methylenebis-, reaction products with bisphenol A diglycidyl ether homopolymer	3 - <5	129733-57-9
2,4,6-tris(dimethylaminomethyl)phenol	1 - <3	90-72-2
危險成分	浓度 %	CAS号码
腰果壳油二羟基乙醚	10 - <20	232268-65-4
苯醇	5 - <10	100-51-6
1,3-环己二甲胺	5 - <10	2579-20-6
4,4'-亚基双环己胺	3 - <5	1761-71-3
4,4'-亚基双环己胺与双酚 A 缩水甘油 酯醚均聚物的反应产物	3 - <5	129733-57-9
2,4,6-三[(二甲氨基)甲基]苯酚	1 - <3	90-72-2

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

- Inhalation** : Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel.
- Ingestion** : If swallowed, seek medical advice immediately and show the container or label. Keep person warm and at rest. Do NOT induce vomiting.
- Skin contact** : Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognised skin cleanser. Do NOT use solvents or thinners.
- Eye contact** : Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Seek immediate medical attention.

### 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 severe burns. Harmful in contact with skin. May cause an allergic skin reaction.
- Ingestion** : May be harmful if swallowed.

#### Over-exposure signs/symptoms

- Eye contact** : Adverse symptoms may include the following:  
pain  
watering  
redness
- Inhalation** : No specific data.
- Skin contact** : Adverse symptoms may include the following:  
pain or irritation  
redness  
blistering may occur
- Ingestion** : Adverse symptoms may include the following:  
stomach pains

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

- Notes to physician** : 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.
- 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** : Use an extinguishing agent suitable for the surrounding fire.
- Not suitable** : None known.

**Specific hazards arising from the chemical** : In a fire or if heated, a pressure increase will occur and the container may burst. 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** : Decomposition products may include the following materials:  
carbon oxides  
nitrogen oxides  
metal oxide/oxides

**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.

## Section 6. Accidental release measures

**Personal precautions, protective equipment and emergency procedures** : 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. Do not breathe vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

**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

**Large spill** : Stop leak if without risk. Move containers from spill area. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilt product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

**Small spill** : Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

## Section 7. Handling and storage

- Precautions for safe handling** : Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems 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 breathe vapour or mist. Do not ingest. Avoid release to the environment. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.
- Conditions for safe storage, including any incompatibilities** : Store between the following temperatures: 0 to 35°C (32 to 95°F). 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 8. Exposure controls/personal protection

### Control parameters

#### Occupational exposure limits

None.

- 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.

### Individual protection measures

- Respiratory protection** : 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. If workers are exposed to concentrations above the exposure limit, they must use appropriate, certified respirators. Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary.

- 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.

- Gloves** : nitrile neoprene

- 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.

- Eye protection** : Chemical splash goggles and face shield.

## Section 8. Exposure controls/personal protection

- 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.

## Section 9. Physical and chemical properties

### Appearance

- Physical state** : Liquid.  
**Colour** : Beige.  
**Odour** : Characteristic.  
**Odour threshold** : Not available.  
**pH** : Not applicable.  
**Melting point** : Not available.  
**Boiling point** : >37.78°C (>100°F)  
**Flash point** : Closed cup: 100°C (212°F)  
**Flammability (solid, gas)** : Not available.  
**Burning time** : Not applicable.  
**Burning rate** : Not applicable.  
**Decomposition temperature** : Not available.  
**Evaporation rate** : Not available.  
**Lower and upper explosive (flammable) limits** : Not available.  
**Vapour pressure** : Not available.  
**Vapour density** : Not available.  
**Relative density** : 1.56

### Solubility(ies)

Media	Result
cold water	Not soluble

- Partition coefficient: n-octanol/water** : Not applicable.  
**Auto-ignition temperature** : Not available.  
**Viscosity** : Kinematic (40°C): >21 mm<sup>2</sup>/s

## Section 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** : When exposed to high temperatures may produce hazardous decomposition products.

## Section 10. Stability and reactivity

**Incompatible materials** : Keep away from the following materials to prevent strong exothermic reactions: oxidising agents, strong alkalis, strong acids.

**Hazardous decomposition products** : Depending on conditions, decomposition products may include the following materials: carbon oxides nitrogen oxides metal oxide/oxides

**Hazardous polymerisation** : Under normal conditions of storage and use, hazardous polymerisation will not occur.

## Section 11. Toxicological information

### Information on toxicological effects

#### Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
benzyl alcohol	LC50 Inhalation Dusts and mists	Rat	>4178 mg/m <sup>3</sup>	4 hours
	LD50 Dermal	Rabbit	2000 mg/kg	-
1,3-Cyclohexanedimethanamine	LD50 Oral	Rat	1.23 g/kg	-
	LD50 Dermal	Rabbit	1700 mg/kg	-
4,4'-methylenebis (cyclohexylamine)	LD50 Oral	Rat	700 mg/kg	-
	LD50 Dermal	Rabbit	2.11 g/kg	-
2,4,6-tris (dimethylaminomethyl) phenol	LD50 Oral	Rat	0.625 g/kg	-
	LD50 Dermal	Rabbit	1.28 g/kg	-
	LD50 Dermal	Rat	1280 mg/kg	-
	LD50 Oral	Rat	1200 mg/kg	-

#### Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
2,4,6-tris (dimethylaminomethyl) phenol	Skin - Visible necrosis	Rabbit	-	4 hours	7 days

#### Sensitisation

Not available.

#### Mutagenicity

Not available.

#### Carcinogenicity

Not available.

#### Reproductive toxicity

Not available.

#### Teratogenicity

Not available.

## Section 11. Toxicological information

### Specific target organ toxicity (single exposure)

Not available.

### Specific target organ toxicity (repeated exposure)

Name	Category	Route of exposure	Target organs
4,4'-methylenebis(cyclohexylamine)	Category 2	oral	-

### Aspiration hazard

Name	Result
benzyl alcohol	ASPIRATION HAZARD - Category 2

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

### Potential acute health effects

- Inhalation** : No known significant effects or critical hazards.
- Ingestion** : May be harmful if swallowed.
- Skin contact** : Causes severe burns. Harmful in contact with skin. May cause an allergic skin reaction.
- Eye contact** : Causes serious eye damage.

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

- Eyes** : Adverse symptoms may include the following:  
pain  
watering  
redness
- Inhalation** : No specific data.
- Skin** : Adverse symptoms may include the following:  
pain or irritation  
redness  
blistering may occur
- Ingestion** : Adverse symptoms may include the following:  
stomach pains

### 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.



## Section 11. Toxicological information

**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.
- Reproductive toxicity** : No known significant effects or critical hazards.
- Inhalation** : No known significant effects or critical hazards.
- Ingestion** : No known significant effects or critical hazards.
- Skin contact** : Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.
- Eye contact** : No known significant effects or critical hazards.

### Numerical measures of toxicity

#### Acute toxicity estimates

Product/ingredient name	Oral (mg/kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapours) (mg/l)	Inhalation (dusts and mists) (mg/l)
AMERCOAT 1202 HARDENER	3465.6	1607.9	N/A	N/A	14.2
Cashew, nutshell liq., 2-hydroxyethyl ethers	N/A	1100	N/A	N/A	N/A
benzyl alcohol	1230	2000	N/A	N/A	1.5
1,3-Cyclohexanedimethanamine	700	1700	N/A	N/A	N/A
4,4'-methylenebis(cyclohexylamine)	625	2110	N/A	N/A	N/A
2,4,6-tris(dimethylaminomethyl)phenol	1200	1280	N/A	N/A	N/A

### Other information :

Sanding and grinding dusts may be harmful if inhaled. Repeated exposure to high vapor concentrations may cause irritation of the respiratory system and permanent brain and nervous system damage. Inhalation of vapour/aerosol concentrations above the recommended exposure limits causes headaches, drowsiness and nausea and may lead to unconsciousness or death.

## Section 12. Ecological information

### Toxicity

Product/ingredient name	Result	Species	Exposure
1,3-Cyclohexanedimethanamine	LC50 130 mg/l	Fish - <i>golden orfe</i>	96 hours
2,4,6-tris(dimethylaminomethyl)phenol	Acute LC50 175 mg/l	Fish	96 hours

### Persistence and degradability

**Section 12. Ecological information**

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
benzyl alcohol	-	-	Readily

**Bioaccumulative potential**

Product/ingredient name	LogP <sub>ow</sub>	BCF	Potential
benzyl alcohol	0.87	-	Low
1,3-Cyclohexanedimethanamine	0.783	-	Low
4,4'-methylenebis (cyclohexylamine)	2.03	-	Low
2,4,6-tris (dimethylaminomethyl)phenol	0.219	-	Low

**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**

	UN	IMDG	IATA
<b>UN number</b>	UN3066	UN3066	UN3066
<b>UN proper shipping name</b>	PAINT	PAINT	PAINT
<b>Transport hazard class(es)</b>	8	8	8
<b>Packing group</b>	III	III	III
<b>Environmental hazards</b>	No.	No.	No.

## Section 14. Transport information

<b>Marine pollutant substances</b>	Not applicable.	Not applicable.	Not applicable.
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**Additional information**

**UN** : None identified.  
**IMDG** : None identified.  
**IATA** : None identified.

**Special precautions for user** : **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.

**Transport in bulk according to IMO instruments** : Not applicable.

## Section 15. Regulatory information

**TCCSCA List of toxic chemicals**

Not applicable.

**TCCSCA List of concerned chemicals**

Not applicable.

**List of chemicals for which manufacturing or handling is defined as "work specially hazardous to health"** : This product contains substances "Specially hazardous to health": xylene, methanol.

Regulations Applicable:

1. Rules for Occupational Safety and Health Facilities
2. Regulations for the Labeling and Hazard Communication of Hazardous Chemicals
3. Prevention Rules for Organic Solvent Intoxication/Poisoning.
4. Standards of Permissible Exposure Limits of Airborne Hazardous Substances in Workplace
5. Traffic Safety Regulation of Road.

## Section 16. Other information

<b>References</b>	Not available.
<b>Organisation that prepared the SDS</b>	<p><b>Name:</b> PPG Industries International Inc., Taiwan Branch</p> <p><b>Address / Telephone :</b>                  No.209, Hong Tzuenn Rd Ping Chen City, Taoyuan County, Taiwan                  North: +886-3-3663922                  North : +886-911998320                  South: +886-7-8718105                  South : +886-932793707</p>

## Section 16. Other information

<b>Person who prepared the SDS</b>	<b>Title:</b> Technical manager Technical manager	<b>Name: (Signature):</b> Tony Cheng Daniel Wu
<b>Date of issue</b>	27 February 2024	

**Date of previous issue** : 12/4/2023

**Version** : 1.01

✔ Indicates information that has changed from previously issued version.

**Remarks** : New SDS layout incorporating TW Table 2017

**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  
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

### Disclaimer

*The information contained in this data sheet is based on present scientific and technical knowledge. The purpose of this information is to draw attention to the health and safety aspects concerning the products supplied by PPG, and to recommend precautionary measures for the storage and handling of the products. No warranty or guarantee is given in respect of the properties of the products. No liability can be accepted for any failure to observe the precautionary measures described in this data sheet or for any misuse of the products.*