SAFETY DATA SHEET

Date of issue 15 June 2021
Version 7

Section 1. Product and company identification

Product name : AMERCOAT 78HB CURE
Product code : AT78HB-B
Other means of identification : Not available.
Product type : Liquid.

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

Identified uses
Coating. Paints. Painting-related materials.

Uses advised against	**Reason**
Not applicable.	

Supplier's details:

Supplier : PPG INDUSTRIES ARGENTINA S.R.L.
Calle 9 y Del gasoducto N° 3810
Parque Industrial Pilar -(CP 1629) Pilar
Provincia de Buenos Aires - Argentina
Teléfono : 54-0230 4529700
Fax : 54-0230 4529706

Email address: : HazComLatam@ppg.com

Emergency telephone number : Centro de intoxicaciones 0800-333-0160 /CIQUIME 0800-222-2933

Section 2. Hazards identification

Classification of the substance or mixture : FLAMMABLE LIQUIDS - Category 4
ACUTE TOXICITY (oral) - Category 4
ACUTE TOXICITY (dermal) - Category 4
ACUTE TOXICITY (inhalation) - Category 2
SKIN CORROSION - Category 1
SERIOUS EYE DAMAGE - Category 1
SKIN SENSITIZATION - Category 1
GERM CELL MUTAGENICITY - Category 2
TOXIC TO REPRODUCTION - Category 2
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3
AQUATIC HAZARD (ACUTE) - Category 3
AQUATIC HAZARD (LONG-TERM) - Category 2

Section 2. Hazards identification

Target organs : Contains material which causes damage to the following organs: blood, liver, heart, brain, upper respiratory tract, skin, central nervous system (CNS).
Contains material which may cause damage to the following organs: kidneys, lungs, the nervous system, spleen, gastrointestinal tract, cardiovascular system, immune system, eye, lens or cornea.

Percentage of the mixture consisting of ingredient(s) of unknown acute oral toxicity: 11.6%
Percentage of the mixture consisting of ingredient(s) of unknown acute dermal toxicity: 19.2%
Percentage of the mixture consisting of ingredient(s) of unknown acute inhalation toxicity: 49.8%

Percentage of the mixture consisting of ingredient(s) of unknown hazards to the aquatic environment: 31.6%

GHS label elements

Hazard pictograms :



Signal word : Danger

Hazard statements : Combustible liquid.
Harmful if swallowed or in contact with skin.
Causes severe skin burns and eye damage.
May cause an allergic skin reaction.
Fatal if inhaled.
May cause respiratory irritation.
Suspected of causing genetic defects.
Suspected of damaging fertility or the unborn child.
Harmful to aquatic life.
Toxic to aquatic life with long lasting effects.

Precautionary statements

Prevention : Obtain special instructions before use. Wear protective gloves, protective clothing and eye or face protection. In case of inadequate ventilation wear respiratory protection. Keep away from flames and hot surfaces. No smoking. Avoid release to the environment. Do not breathe vapor. Do not eat, drink or smoke when using this product. Wash thoroughly after handling.

Response : Collect spillage. IF exposed or concerned: Get medical advice or attention. 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 in a well-ventilated place. Keep container tightly closed. Keep cool.

Section 2. Hazards identification

Disposal : Dispose of contents and container in accordance with all local, regional, national and international regulations.

Other hazards which do not result in classification : Causes digestive tract burns. Prolonged or repeated contact may dry skin and cause irritation.

Section 3. Composition/information on ingredients

Substance/mixture : Mixture

Other means of identification : Not available.

CAS number/other identifiers

CAS number : Not applicable.

Ingredient name	%	CAS number
3,6,9-triazaundecamethylenediamine	20 - <30	112-57-2
2,2'-iminodiethylamine	15 - <20	111-40-0
benzyl alcohol	7 - <10	100-51-6
1-methoxy-2-propanol	5 - <7	107-98-2
cyclohex-1,2-ylenediamine	5 - <7	694-83-7
hexamethylenediamine	5 - <7	124-09-4
phenol	3 - <5	108-95-2
Solvent naphtha (petroleum), light aromatic	3 - <5	64742-95-6
2,4,6-tris(dimethylaminomethyl)phenol	3 - <5	90-72-2
1,2,4-trimethylbenzene	2 - <3	95-63-6
2-piperazin-1-ylethylamine	0.1 - <0.2	140-31-8

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.

SUB codes represent substances without registered CAS Numbers.

Section 4. First aid measures

Description of necessary first aid measures

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.

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.

Skin contact : Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognized skin cleanser. Do NOT use solvents or thinners.

Ingestion : If swallowed, seek medical advice immediately and show this container or label. Keep person warm and at rest. Do NOT induce vomiting.

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.

Specific treatments : The exposed person may need to be kept under medical surveillance for 48 hours. No specific treatment.

Section 4. First aid measures

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.

Potential acute health effects

Eye contact : Causes serious eye damage.

Inhalation : Fatal if inhaled. May cause respiratory irritation.

Skin contact : Causes severe burns. Harmful in contact with skin. Defatting to the skin. May cause an allergic skin reaction.

Ingestion : Harmful if swallowed. Corrosive to the digestive tract. Causes burns.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media : Use dry chemical, CO_2, water spray (fog) or foam.

Unsuitable extinguishing media : Do not use water jet.

Specific hazards arising from the chemical : Combustible liquid. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. This material is toxic 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

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. 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.

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 spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders : If specialized 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".

Section 6. Accidental release measures

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. Collect spillage.

Methods and materials for containment and cleaning up

Small spill : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. 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.

Large spill : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach 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 spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

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. Avoid exposure - obtain special instructions before use. Avoid exposure during pregnancy. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Avoid release to the environment. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Empty containers retain product residue and can be hazardous. Do not reuse container.

Conditions for safe storage, including any incompatibilities : Do not store above the following temperature: 50°C (122°F). 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. Store locked up. 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. See Section 10 for incompatible materials before handling or use.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
2,2'-iminodiethylamine	**Ministry of Labor, Employment and Social Security. Argentina (Resolution 295,11/2003) (Argentina, 11/2003). Absorbed through skin.** TWA: 1 ppm 8 hours.
1-methoxy-2-propanol	**Ministry of Labor, Employment and Social Security. Argentina (Resolution 295,11/2003) (Argentina, 11/2003).** STEL: 150 ppm 15 minutes. TWA: 100 ppm 8 hours.
hexamethylenediamine	**Ministry of Labor, Employment and Social Security. Argentina (Resolution 295,11/2003) (Argentina, 11/2003).** TWA: 0.5 ppm 8 hours.
phenol	**Ministry of Labor, Employment and Social Security. Argentina (Resolution 295,11/2003) (Argentina, 11/2003). Absorbed through skin.** TWA: 5 ppm 8 hours.
1,2,4-trimethylbenzene	**Ministry of Labor, Employment and Social Security. Argentina (Resolution 295,11/2003) (Argentina, 11/2003).** TWA: 25 ppm 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.

Appropriate engineering controls : Use only with adequate ventilation. 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.

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.

Section 8. Exposure controls/personal protection

Eye protection : Chemical splash goggles and face shield.

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.

Gloves : butyl rubber

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.

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.

Section 9. Physical and chemical properties

Appearance

Physical state : Liquid.

Color : Clear

Odor : Characteristic.

pH : Not applicable.

Melting point : Not available.

Boiling point : >37.78°C (>100°F)

Flash point : Closed cup: 61.11°C (142°F)

Evaporation rate : 0.45 (butyl acetate = 1)

Flammability (solid, gas) : Not available.

Lower and upper explosive (flammable) limits : Not available.

Vapor pressure : 1.3 kPa (9.8 mm Hg)

Vapor density : Not available.

Relative density : 0.98

Solubility : Insoluble in the following materials: cold water.

Water Solubility at room temperature : 54.8 g/l

Partition coefficient: n-octanol/water : Not applicable.

Auto-ignition temperature : Not available.

Decomposition temperature : Not available.

Section 9. Physical and chemical properties

Viscosity : Kinematic (40°C (104°F)): >21 mm^2/s (>21 cSt)

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

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

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

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
3,6,9-triazaundecamethylenediamine	LD50 Dermal	Rabbit	0.66 g/kg	-
	LD50 Oral	Rat	0.205 g/kg	-
2,2'-iminodiethylamine	LC50 Inhalation Dusts and mists	Rat	0.07 to 0.3 mg/l	4 hours
	LD50 Dermal	Rabbit	1090 mg/kg	-
	LD50 Oral	Rat	1080 mg/kg	-
benzyl alcohol	LC50 Inhalation Dusts and mists	Rat	>4178 mg/m^3	4 hours
	LD50 Dermal	Rabbit	2000 mg/kg	-
	LD50 Oral	Rat	1.23 g/kg	-
1-methoxy-2-propanol	LC50 Inhalation Vapor	Rat	>7000 ppm	6 hours
	LD50 Dermal	Rabbit	13 g/kg	-
	LD50 Oral	Rat	5.2 g/kg	-
cyclohex-1,2-ylenediamine	LD50 Oral	Rat	4556 mg/kg	-
hexamethylenediamine	LD50 Dermal	Rabbit	1.11 g/kg	-
	LD50 Oral	Rat	750 mg/kg	-
phenol	LC50 Inhalation Dusts and mists	Rat	900 mg/m^3	4 hours
	LD50 Dermal	Rat	669 mg/kg	-
	LD50 Oral	Rat	0.34 g/kg	-
Solvent naphtha (petroleum), light aromatic	LD50 Dermal	Rabbit	3.48 g/kg	-
	LD50 Oral	Rat	8400 mg/kg	-
2,4,6-tris (dimethylaminomethyl) phenol	LD50 Dermal	Rabbit	1.28 g/kg	-
	LD50 Dermal	Rat	1280 mg/kg	-
	LD50 Oral	Rat	1200 mg/kg	-
1,2,4-trimethylbenzene	LC50 Inhalation Vapor	Rat	18000 mg/m^3	4 hours
	LD50 Oral	Rat	5 g/kg	-
2-piperazin-1-ylethylamine	LC50 Inhalation Dusts and mists	Rat	>5 mg/l	4 hours

Section 11. Toxicological information

	LD50 Dermal LD50 Oral	Rabbit Rat	866 mg/kg 2140 mg/kg	- -

Conclusion/Summary : There are no data available on the mixture itself.

Irritation/Corrosion

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

Conclusion/Summary

Skin : There are no data available on the mixture itself.

Eyes : There are no data available on the mixture itself.

Respiratory : There are no data available on the mixture itself.

Sensitization

Product/ingredient name	Route of exposure	Species	Result
2,4,6-tris (dimethylaminomethyl) phenol	skin	Guinea pig	Sensitizing
2-piperazin-1-ylethylamine	skin	Guinea pig	Sensitizing

Conclusion/Summary

Skin : There are no data available on the mixture itself.

Respiratory : There are no data available on the mixture itself.

Mutagenicity

Not available.

Conclusion/Summary : There are no data available on the mixture itself.

Carcinogenicity

Not available.

Conclusion/Summary : There are no data available on the mixture itself.

Classification

Product/ingredient name	OSHA	IARC	NTP
phenol	-	3	-

Carcinogen Classification code:

IARC: 1, 2A, 2B, 3, 4
NTP: Known to be a human carcinogen; Reasonably anticipated to be a human carcinogen
OSHA: +
Not listed/not regulated: -

Reproductive toxicity

Not available.

Conclusion/Summary : There are no data available on the mixture itself.

Teratogenicity

Not available.

Conclusion/Summary : There are no data available on the mixture itself.

Section 11. Toxicological information

Specific target organ toxicity (single exposure)

Name	Category	Route of exposure	Target organs
2,2'-iminodiethylamine	Category 3	-	Respiratory tract irritation
1-methoxy-2-propanol	Category 3	-	Narcotic effects
hexamethylenediamine	Category 3	-	Respiratory tract irritation
Solvent naphtha (petroleum), light aromatic	Category 3	-	Respiratory tract irritation
	Category 3		Narcotic effects
1,2,4-trimethylbenzene	Category 3	-	Respiratory tract irritation

Specific target organ toxicity (repeated exposure)

Name	Category	Route of exposure	Target organs
phenol	Category 2	-	-
2-piperazin-1-ylethylamine	Category 1	inhalation	respiratory tract

Target organs : Contains material which causes damage to the following organs: blood, liver, heart, brain, upper respiratory tract, skin, central nervous system (CNS).
Contains material which may cause damage to the following organs: kidneys, lungs, the nervous system, spleen, gastrointestinal tract, cardiovascular system, immune system, eye, lens or cornea.

Aspiration hazard

Name	Result
benzyl alcohol	ASPIRATION HAZARD - Category 2
Solvent naphtha (petroleum), light aromatic	ASPIRATION HAZARD - Category 1

Information on the likely routes of exposure : Not available.

Potential acute health effects

Eye contact : Causes serious eye damage.

Inhalation : Fatal if inhaled. May cause respiratory irritation.

Skin contact : Causes severe burns. Harmful in contact with skin. Defatting to the skin. May cause an allergic skin reaction.

Ingestion : Harmful if swallowed. Corrosive to the digestive tract. Causes burns.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : Adverse symptoms may include the following:
pain
watering
redness

Section 11. Toxicological information

Inhalation : Adverse symptoms may include the following:
respiratory tract irritation
coughing
reduced fetal weight
increase in fetal deaths
skeletal malformations

Skin contact : Adverse symptoms may include the following:
pain or irritation
redness
dryness
cracking
blistering may occur
reduced fetal weight
increase in fetal deaths
skeletal malformations

Ingestion : Adverse symptoms may include the following:
stomach pains
reduced fetal weight
increase in fetal deaths
skeletal malformations

Delayed and immediate effects and also chronic effects from short and long term exposure

Conclusion/Summary : There are no data available on the mixture itself. Exposure to component solvent vapor concentrations in excess of the stated occupational exposure limit may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, loss of consciousness. Solvents may cause some of the above effects by absorption through the skin. There is some evidence that repeated exposure to organic solvent vapors in combination with constant loud noise can cause greater hearing loss than expected from exposure to noise alone. If splashed in the eyes, the liquid may cause irritation and reversible damage. Ingestion may cause nausea, diarrhea and vomiting. This takes into account, where known, delayed and immediate effects and also chronic effects of components from short-term and long-term exposure by oral, inhalation and dermal routes of exposure and eye contact.

Short term exposure

Potential immediate effects : There are no data available on the mixture itself.

Potential delayed effects : There are no data available on the mixture itself.

Long term exposure

Potential immediate effects : There are no data available on the mixture itself.

Potential delayed effects : There are no data available on the mixture itself.

Potential chronic health effects

Not available.

General : Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis. Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.

Section 11. Toxicological information

Carcinogenicity : No known significant effects or critical hazards.

Mutagenicity : Suspected of causing genetic defects.

Reproductive toxicity : Suspected of damaging fertility or the unborn child.

Numerical measures of toxicity

Acute toxicity estimates

Product/ingredient name	Oral (mg/kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapors) (mg/l)	Inhalation (dusts and mists) (mg/l)
AMERCOAT 78HB CURE	651.8	1318.2	N/A	84	0.12
3,6,9-triazaundecamethylenediamine	500	1100	N/A	N/A	N/A
2,2'-iminodiethylamine	1080	1090	N/A	N/A	0.05
benzyl alcohol	1230	2000	N/A	N/A	1.5
1-methoxy-2-propanol	5200	13000	N/A	N/A	N/A
cyclohex-1,2-ylenediamine	4556	N/A	N/A	11	1.5
hexamethylenediamine	750	1110	N/A	N/A	N/A
phenol	100	669	N/A	N/A	0.9
Solvent naphtha (petroleum), light aromatic	8400	3480	N/A	N/A	N/A
2,4,6-tris(dimethylaminomethyl)phenol	1200	1280	N/A	N/A	N/A
1,2,4-trimethylbenzene	5000	N/A	N/A	18	1.5
2-piperazin-1-ylethylamine	2140	866	N/A	N/A	N/A

Other information : Not available.

Section 12. Ecological information

Ecotoxicity

Product/ingredient name	Result	Species	Exposure
2,2'-iminodiethylamine	Acute LC50 430 mg/l	Fish	96 hours
1-methoxy-2-propanol	Acute LC50 23300 mg/l	Daphnia	48 hours
	Acute LC50 >4500 mg/l Fresh water	Fish	96 hours
phenol	Chronic IC10 2.38 mg/l Fresh water	Daphnia - Daphnia magna - Neonate	21 days
Solvent naphtha (petroleum), light aromatic	Acute LC50 8.2 mg/l	Fish	96 hours
2,4,6-tris (dimethylaminomethyl)phenol	Acute LC50 175 mg/l	Fish	96 hours
2-piperazin-1-ylethylamine	Acute EC50 58 mg/l	Daphnia	48 hours

Persistence/degradability

Product/ingredient name	Test	Result	Dose	Inoculum
2,2'-iminodiethylamine	-	87 % - Readily - 21 days	-	-
2-piperazin-1-ylethylamine	OECD 301F	0 % - Not readily - 28 days	-	-

Section 12. Ecological information

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
2,2'-iminodiethylamine	-	-	Readily
benzyl alcohol	-	-	Readily
2-piperazin-1-ylethylamine	-	-	Not readily

Bioaccumulative potential

Product/ingredient name	$LogP_{ow}$	BCF	Potential
2,2'-iminodiethylamine	-5.58	4.47	low
benzyl alcohol	0.87	-	low
1-methoxy-2-propanol	<1	-	low
phenol	1.47	17.38	low
2,4,6-tris (dimethylaminomethyl)phenol	0.219	-	low
1,2,4-trimethylbenzene	3.63	120.23	low
2-piperazin-1-ylethylamine	-1.48	-	low

Mobility in soil

Soil/water partition coefficient (K_{OC}) : 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 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. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

	UN	Brazil (ANTT)	IMDG	IATA
UN number	UN2927	UN2927	UN2927	UN2927
UN proper shipping name	TOXIC LIQUID, CORROSIVE, ORGANIC, N.O.S. (phenol, 3,6,9-triazaundecamethylenediamine)	TOXIC LIQUID, CORROSIVE, ORGANIC, N.O.S. (phenol, 3,6,9-triazaundecamethylenediamine)	TOXIC LIQUID, CORROSIVE, ORGANIC, N.O.S. (phenol, 3,6,9-triazaundecamethylenediamine)	TOXIC LIQUID, CORROSIVE, ORGANIC, N.O.S. (phenol, 3,6,9-triazaundecamethylenediamine)

Section 14. Transport information

Transport hazard class(es)	6.1 (8)	6.1 (8)	6.1 (8)	6.1 (8)
Packing group	II	II	II	II
Environmental hazards	Yes. The environmentally hazardous substance mark is not required.	Yes. The environmentally hazardous substance mark is not required.	Yes.	Yes. The environmentally hazardous substance mark is not required.
Marine pollutant substances	Not applicable.	Not applicable.	(3,6,9-triazaundecamethylenediamine, Solvent naphtha (petroleum), light aromatic)	Not applicable.

Additional information

UN : None identified.

Brazil : None identified.

Risk number : 68

IMDG : The marine pollutant mark is not required when transported in sizes of ≤5 L or ≤5 kg. The segregation group has been manually assigned based upon product analysis.

IATA : The environmentally hazardous substance mark may appear if required by other transportation regulations.

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

Safety, health and environmental regulations specific for the product : No known specific national and/or regional regulations applicable to this product (including its ingredients).

Section 16. Other information

History

Date of previous issue : **7/3/2019**

Version : **7**

EHS

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

Section 16. Other information

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

References : ABNT NBR 14725-4: 2014
ANTT - National Land Transportation Agency

Indicates information that has changed from previously issued version.

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.