SAFETY DATA SHEET



Date of issue/Date of revision 22 November 2022 Version 5

Section 1. Identification		
Product name	: SIGMARINE 48 RED / SIGMA 6188	
Product code	: 000001161547	
Other means of identification	: 00224100; 00267914	
Product type	: Liquid.	
Relevant identified uses of	the substance or mixture and uses advised against	
Product use	: Professional applications, Used by spraying.	
Use of the substance/ mixture	: Coating.	
Uses advised against	: Not applicable.	
Manufacturer	: PPG Industries, Inc. One PPG Place Pittsburgh, PA 15272	
Emergency telephone number	: (412) 434-4515 (U.S.) (514) 645-1320 (Canada) SETIQ Interior de la República: 800-00-214-00 (México) SETIQ Ciudad de México: (55) 5559-1588 (México)	
Technical Phone Number	: 888-977-4762	

Section 2. Hazards identification

OSHA/HCS status	 This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
Classification of the substance or mixture	 FLAMMABLE LIQUIDS - Category 3 ACUTE TOXICITY (inhalation) - Category 4 CARCINOGENICITY - Category 1B TOXIC TO REPRODUCTION - Category 2 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 1 Percentage of the mixture consisting of ingredient(s) of unknown acute toxicity: 39.6% (oral), 90.6% (dermal), 73.3% (inhalation)
GHS label elements Hazard pictograms	

Section 2. Hazards identification

Signal word	: Danger
Hazard statements	 Flammable liquid and vapor. Harmful if inhaled. May cause drowsiness or dizziness. May cause cancer. Suspected of damaging fertility or the unborn child. Causes damage to organs through prolonged or repeated exposure. (central nervous system (CNS))
Precautionary statements	
Prevention	: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves, protective clothing and eye or face protection. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use explosion-proof electrical, ventilating or lighting equipment. Use non-sparking tools. Take action to prevent static discharges. Use only outdoors or in a well-ventilated area. Do not breathe vapor. Do not eat, drink or smoke when using this product. Wash thoroughly after handling.
Response	: IF exposed or concerned: Get medical advice or attention. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor if you feel unwell. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.
Storage	: Store locked up. Store in a well-ventilated place. Keep container tightly closed. Keep cool.
Disposal	 Dispose of contents and container in accordance with all local, regional, national and international regulations.
Supplemental label elements	: 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 vapor/aerosol concentrations above the recommended exposure limits causes headaches, drowsiness and nausea and may lead to unconsciousness or death. Avoid contact with skin and clothing. Wash thoroughly after handling. Emits toxic fumes when heated. DANGER - RAGS, STEEL WOOL OR WASTE SOAKED WITH THIS PRODUCT MAY SPONTANEOUSLY CATCH FIRE IF IMPROPERLY DISCARDED. IMMEDIATELY AFTER EACH USE, PLACE RAGS, STEEL WOOL OR WASTE IN A SEALED WATER-FILLED METAL CONTAINER.
Hazards not otherwise classified	: Prolonged or repeated contact may dry skin and cause irritation.

Section 3. Composition/information on ingredients

Substance/mixture	Mixture	
Product name	SIGMARINE 48	RED / SIGMA 6188
Other means of identification	00224100; 0026	67914

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Section 3. Composition/information on ingredients

Ingredient name	%	CAS number
Naphtha (petroleum), hydrodesulfurized heavy	≥20 - ≤50	64742-82-1
nonane	≥1.0 - ≤5.0	111-84-2
Limestone	≥1.0 - ≤5.0	1317-65-3
3-hydroxy-N-(o-tolyl)-4-[(2,4,5-trichlorophenyl)azo]naphthalene-	≥1.0 - ≤5.0	6535-46-2
2-carboxamide		
1,2,4-trimethylbenzene	≥1.0 - ≤3.3	95-63-6
Talc , not containing asbestiform fibres	≥1.0 - ≤5.0	14807-96-6
xylene	≤1.6	1330-20-7
2-ethylhexanoic acid, zirconium salt	≤1.0	22464-99-9
ethylbenzene	<1.0	100-41-4
neodecanoic acid, cobalt salt	<1.0	27253-31-2
cumene	<1.0	98-82-8
calcium bis(2-ethylhexanoate)	<1.0	136-51-6

SUB codes represent substances without registered CAS Numbers.

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

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

If ingestion, irritation, any type of overexposure or symptoms of overexposure occur during or persists after use of this product, contact a POISON CONTROL CENTER, EMERGENCY ROOM OR PHYSICIAN immediately; have Safety Data Sheet information available. Never give anything by mouth to an unconscious or convulsing person.

Description of necessary first aid measures

Eye contact	: Remove contact lenses, irrigate copiously with clean, fresh water, holding the eyelids apart for at least 10 minutes and seek immediate medical advice.
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.
Most important sympt	oms/effects, acute and delayed
Potential acute healt	h effects
Eye contact	: No known significant effects or critical hazards.
Inhalation	: Harmful if inhaled. Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness.
Skin contact	: Defatting to the skin. May cause skin dryness and irritation.
Ingestion	: Can cause central nervous system (CNS) depression.
Over-exposure signs	symptoms

Eye contact : No specific data.

Section 4. First aid measures

Inhalation	: Adverse symptoms may include the following:
	nausea or vomiting
	headache
	drowsiness/fatigue
	dizziness/vertigo
	unconsciousness
	reduced fetal weight
	increase in fetal deaths
	skeletal malformations
Skin contact	: Adverse symptoms may include the following:
	irritation
	dryness
	cracking
	reduced fetal weight
	increase in fetal deaths
	skeletal malformations
Ingestion	: Adverse symptoms may include the following:
•	reduced fetal weight
	increase in fetal deaths
	skeletal malformations
ndication of immediate med	lical 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. 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	: Flammable liquid and vapor. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back. Runoff to sewer may create fire or explosion hazard.
Hazardous thermal decomposition products	: Decomposition products may include the following materials: carbon oxides nitrogen oxides halogenated compounds metal oxide/oxides
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Section 5. Fire-fighting measures

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, protec	tive 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. Avoid breathing 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".
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).
Methods and materials for co	entainment 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 Protective measures : Put on appropriate personal protective equipment (see Section 8). 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. 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

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Section 7. Handling and storage

	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. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.
Special precautions	: Ingestion of product or cured coating may be harmful. Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back. Vapors are heavier than air and may spread along floors. Materials such as cleaning rags, paper wipes and protective clothing, which are contaminated with the product may spontaneously self-ignite some hours later. To avoid the risks of fires, all contaminated materials should be stored in purpose-built containers or in metal containers with tight-fitting, self-closing lids. Contaminated materials should be removed from the workplace at the end of each working day and be stored outside. If this material is part of a multiple component system, read the Safety Data Sheet(s) for the other component or components before blending as the resulting mixture may have the hazards of all of its parts.
Advice on general occupational hygiene	: 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 between the following temperatures: 0 to 35°C (32 to 95°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.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits	
Naphtha (petroleum), hydrodesulfurized heavy	None.	
nonane	ACGIH TLV (United States, 1/2022).	
	TWA: 200 ppm 8 hours.	
	TWA: 1050 mg/m ³ 8 hours.	
Limestone	OSHA PEL (United States, 5/2018).	
	TWA: 5 mg/m ³ 8 hours. Form: Respire	able
	fraction	
	TWA: 15 mg/m ³ 8 hours. Form: Total	dust
3-hydroxy-N-(o-tolyl)-4-[(2,4,5-trichlorophenyl)azo]naphthalene- 2-carboxamide	ACGIH TLV (United States).	
	TWA: 10 mg/m³	
1,2,4-trimethylbenzene	ACGIH TLV (United States, 1/2022).	
	TWA: 10 ppm 8 hours.	
Talc , not containing asbestiform fibres	ACGIH TLV (United States, 1/2022).	
	TWA: 2 mg/m ³ 8 hours. Form: Respire	able
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Section 8. Exposure controls/personal protection

	OSHA PEL Z3 (United States).
	TWA: 2 mg/m³
xylene	ACGIH TLV (United States, 1/2022). [xylene]
	STEL: 651 mg/m ³ 15 minutes.
	TWA: 434 mg/m³ 8 hours.
	TWA: 20 ppm 8 hours.
	OSHA PEL (United States, 5/2018).
	[Xylenes]
	TWA: 435 mg/m ³ 8 hours.
	TWA: 100 ppm 8 hours.
2-ethylhexanoic acid, zirconium salt	ACGIH TLV (United States, 1/2022).
	[Zirconium and compounds]
	STEL: 10 mg/m³, (as Zr) 15 minutes.
	TWA: 5 mg/m ³ , (as Zr) 8 hours.
	OSHA PEL (United States, 5/2018).
	[Zirconium compounds]
	TWA: 5 mg/m³, (as Zr) 8 hours.
ethylbenzene	ACGIH TLV (United States, 1/2022).
oury is on zono	Ototoxicant.
	TWA: 20 ppm 8 hours.
	OSHA PEL (United States, 5/2018).
	TWA: $435 \text{ mg/m}^3 8 \text{ hours.}$
	TWA: 435 mg/m 8 hours.
noodooonoio ooid, oobalt oolt	
neodecanoic acid, cobalt salt	ACGIH TLV (United States, 1/2022). [cobalt
	and inorganic compounds] Skin sensitizer.
	Inhalation sensitizer.
	TWA: 0.02 mg/m³, (as Co) 8 hours.
cumene	ACGIH TLV (United States, 1/2022).
	TWA: 5 ppm 8 hours.
	OSHA PEL (United States, 5/2018).
	Absorbed through skin.
	TWA: 245 mg/m³ 8 hours.
	TWA: 50 ppm 8 hours.
calcium bis(2-ethylhexanoate)	None.
Key to abbreviation	ns
A = Acceptable Maximum Peak	S = Potential skin absorption
ACGIH = American Conference of Governmental Industrial Hygienists.	SR = Respiratory sensitization
C = Ceiling Limit	SS = Skin sensitization
F = Fume	STEL = Short term Exposure limit values
IPEL = Internal Permissible Exposure Limit	TD = Total dust
OSHA = Occupational Safety and Health Administration.	TLV = Threshold Limit Value

OSHA = Occupations R = Respirable

Z = OSHA 29 CFR 1910.1200 Subpart Z - Toxic and Hazardous Substances

Consult local authorities for acceptable exposure limits.

: 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.

TWA

= Time Weighted Average

Recommended monitoring procedures

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Section 8. Exposure controls/personal protection

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 meas	sures
Hygiene measures	: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
Eye/face protection	: Safety glasses with side shields.
Skin protection	
Hand protection Gloves	 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. For prolonged or repeated handling, use the following type of gloves:
010703	Recommended: polyvinyl alcohol (PVA), Viton® May be used: nitrile 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. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.
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. The respiratory protection shall be in accordance to 29 CFR 1910.134.

Section 9. Physical and chemical properties

Appearance

Physical state	:	Liquid.	
Color	:	Red.	
Odor	:	Aromatic. [Slight]	
Odor threshold	:	Not available.	
рН	1	Not applicable.	
Melting point	1	Not available.	
Boiling point	1	>37.78°C (>100°F)	
Flash point	1	Closed cup: 44°C (111.2°F)	
Auto-ignition temperature	1	Not available.	
Decomposition temperature	1	Not available.	
Flammability	1	Not available.	
Lower and upper explosive (flammable) limits	1	Not available.	
Evaporation rate	:	Not available.	
Vapor pressure	1	Not available.	
Vapor density	1	Not available.	
Relative density	1	0.96	
Density(lbs / gal)	1	8.01	
		Media	Result
Solubility(ies)	-	cold water	Not soluble
Partition coefficient: n- octanol/water	;	Not applicable.	
Viscosity	:	Kinematic (40°C (104°F)): >	21 mm²/s (>21 cSt)
Volatility	:	<mark>≶</mark> 5% (v/v), 44.627% (w/w)	
% Solid. (w/w)	:	5 5.373	

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. Refer to protective measures listed in sections 7 and 8.
Incompatible materials	: Keep away from the following materials to prevent strong exothermic reactions: oxidizing agents, strong alkalis, strong acids.

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Section 10. Stability and reactivity

Hazardous decomposition products

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

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Naphtha (petroleum),	LD50 Oral	Rat	>5000 mg/kg	-
hydrodesulfurized heavy				
nonane	LC50 Inhalation Gas.	Rat	3200 ppm	4 hours
	LC50 Inhalation Vapor	Rat	16790 mg/m ³	4 hours
Limestone	LD50 Oral	Rat	6450 mg/kg	-
3-hydroxy-N-(o-tolyl)-4-[LD50 Dermal	Rat	>5000 mg/kg	-
(2,4,5-trichlorophenyl)azo]				
naphthalene-2-carboxamide				
	LD50 Oral	Rat	5.1 g/kg	-
1,2,4-trimethylbenzene	LC50 Inhalation Vapor	Rat	18000 mg/m ³	4 hours
	LD50 Oral	Rat	5 g/kg	-
xylene	LD50 Dermal	Rabbit	1.7 g/kg	-
	LD50 Oral	Rat	4.3 g/kg	-
2-ethylhexanoic acid,	LD50 Dermal	Rabbit	>5 g/kg	-
zirconium salt				
	LD50 Oral	Rat	>5 g/kg	-
ethylbenzene	LC50 Inhalation Vapor	Rat	17.8 mg/l	4 hours
	LD50 Dermal	Rabbit	17.8 g/kg	-
	LD50 Oral	Rat	3.5 g/kg	-
neodecanoic acid, cobalt salt	LD50 Oral	Rat - Female	1098 mg/kg	-
cumene	LC50 Inhalation Vapor	Rat	39000 mg/m³	4 hours
	LD50 Dermal	Rabbit	12.3 g/kg	-
	LD50 Oral	Rat	1400 mg/kg	-

Conclusion/Summary

: There are no data available on the mixture itself.

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
xylene	Skin - Moderate in	itant Rabbit	-	24 hours 500 mg	-
Conclusion/Summary		·			
Skin	: There are no dat	a available on the mix	ture itself.		
Eyes	: There are no dat	a available on the mix	ture itself.		
Respiratory	: There are no dat	a available on the mix	ture itself.		
Sensitization					
Product/ingredient name	Route of exposure	Species	R	esult	
neodecanoic acid, cobalt salt	skin	Mouse	Se	ensitizing	
<u>Conclusion/Summary</u> Skin	: There are no dat	a available on the mix	ture itself.		

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Section 11. Toxicological information

Respiratory	: There are no data available on the mixture itself.
Mutagenicity	
Conclusion/Summary	: There are no data available on the mixture itself.
Carcinogenicity	
Conclusion/Summary	: There are no data available on the mixture itself.
Classification	

Product/ingredient name	OSHA	IARC	NTP
₩ylene ethylbenzene neodecanoic acid, cobalt salt cumene	- - -		- - Reasonably anticipated to be a human carcinogen. Reasonably anticipated to be a human carcinogen.

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

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

Teratogenicity

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

Specific target organ toxicity (single exposure)

Name	Category	Route of exposure	Target organs
Maphtha (petroleum), hydrodesulfurized heavy	Category 3	-	Narcotic effects
nonane	Category 3	-	Narcotic effects
1,2,4-trimethylbenzene	Category 3	-	Respiratory tract irritation
Talc , not containing asbestiform fibres	Category 3	-	Respiratory tract irritation
xylene	Category 3	-	Respiratory tract irritation
cumene	Category 3	-	Respiratory tract irritation

Specific target organ toxicity (repeated exposure)

Name	Category	Route of exposure	Target organs
Naphtha (petroleum), hydrodesulfurized heavy	Category 1	-	central nervous system (CNS)
ethylbenzene	Category 2		hearing organs
neodecanoic acid, cobalt salt	Category 1	oral	gastrointestinal tract
cumene	Category 2	-	-

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Section 11. Toxicological information

Target organs

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

Aspiration hazard

Name	Result
Naphtha (petroleum), hydrodesulfurized heavy	ASPIRATION HAZARD - Category 1
nonane	ASPIRATION HAZARD - Category 1
xylene	ASPIRATION HAZARD - Category 1
ethylbenzene	ASPIRATION HAZARD - Category 1
cumene	ASPIRATION HAZARD - Category 1

Information on the likely routes of exposure

Potential acute health effects

Eye contact Inhalation	 No known significant effects or critical hazards. Harmful if inhaled. Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness.
Skin contact Ingestion	 Defatting to the skin. May cause skin dryness and irritation. Can cause central nervous system (CNS) depression.
<u>Over-exposure signs/syr</u>	<u>nptoms</u>
Eye contact	: No specific data.
Inhalation	: Adverse symptoms may include the following:
	nausea or vomiting
	headache
	drowsiness/fatigue
	dizziness/vertigo
	unconsciousness
	reduced fetal weight increase in fetal deaths
	skeletal malformations
Skin contact	: Adverse symptoms may include the following:
	irritation
	dryness
	cracking
	reduced fetal weight
	increase in fetal deaths
	skeletal malformations
Ingestion	: Adverse symptoms may include the following:
	reduced fetal weight
	increase in fetal deaths
	skeletal malformations
	fects 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
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Section 11. Toxicological information

	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.
<u>Short term exposure</u>	
Potential immediate effects	: There are no data available on the mixture itself.
Potential delayed effects	: There are no data available on the mixture itself.
<u>Long term exposure</u>	
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 eff	ects
General	: Causes damage to organs through prolonged or repeated exposure. Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis.
Carcinogenicity	: May cause cancer. Risk of cancer depends on duration and level of exposure.
Mutagenicity	: No known significant effects or critical hazards.
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/ I)
GMARINE 48 RED / SIGMA 6188	63537.3	10512.1 N/A	18765.8 3200	46.5	8.9
Inonane Limestone	N/A 6450	N/A N/A	3200 N/A	16.79 N/A	N/A N/A
3-hydroxy-N-(o-tolyl)-4-[(2,4,5-trichlorophenyl)azo] naphthalene-2-carboxamide	5100	N/A	N/A	N/A	N/A
1,2,4-trimethylbenzene	5000	N/A	N/A	18	1.5
xylene	4300	1700	N/A	11	1.5
ethylbenzene	3500	17800	N/A	17.8	1.5
neodecanoic acid, cobalt salt	1098	N/A	N/A	N/A	N/A
cumene	1400	12300	N/A	39	N/A

Section 12. Ecological information

<u>Toxicity</u>

Product/ingredient name	Result	Species	Exposure
∠ ímestone	Acute LC50 >56000 mg/l	Fish	96 hours
2-ethylhexanoic acid, zirconium salt	Acute LC50 >100 mg/l	Fish	96 hours
ethylbenzene	Acute EC50 1.8 mg/l Fresh water	Daphnia	48 hours
	Chronic NOEC 1 mg/l Fresh water	Daphnia - Ceriodaphnia dubia	-
		United States	Page: 13/18

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Section 12. Ecological information

Persistence and degradability

Product/ingredient name	Test	Result		Dose		Inoculum
ethylbenzene	-	79 % - Readily - 10 days		-		-
Product/ingredient name	Aquatic half-life		Photolysis		Biodeg	radability
₩ylene ethylbenzene	-		-		Readily Readily	

Bioaccumulative potential

LogPow	BCF	Potential
5.65	-	high
2.5	-	low
3 63	120.23	low
3.12	7.4 to 18.5	low
3.6	79.43	low
	5.65 2.5 3.63 3.12	5.65 - 2.5 - 3.63 120.23 3.12 7.4 to 18.5 3.6 79.43

Mobility in soil

Soil/water partition coefficient (Koc)

: Not available.

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
	cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Disposal should be in accordance with applicable regional, national and local laws and regulations. Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees. Section 6. Accidental release measures

Product name SIGMARINE 48 RED / SIGMA 6188

14. Transport information

	DOT	IMDG	ΙΑΤΑ
UN number	UN1263	UN1263	UN1263
UN proper shipping name	PAINT	PAINT	PAINT
Transport hazard class (es)	3	3	3
Packing group	111	III	III
Environmental hazards	No.	Yes.	Yes. The environmentally hazardous substance mark is not required.
Marine pollutant substances	Not applicable.	(Naphtha (petroleum), hydrodesulfurized heavy, nonane)	Not applicable.
Product RQ (lbs)	6611.3	Not applicable.	Not applicable.
RQ substances	(xylene)	Not applicable.	Not applicable.

Additional information

DOT	This product may be re-classified as "Combustible Liquid," unless transported by vessel or aircraft. Non-bulk packages (less than or equal to 119 gal) of combustible liquids are not regulated as hazardous materials in package sizes less than the product reportable quantity.
IMDG	: The marine pollutant mark is not required when transported in sizes of \leq 5 L or \leq 5 kg.
ΙΑΤΑ	: 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 : Not applicable. to IMO instruments

Section 15. Regulatory information

United States

United States inventory (TSCA 8b) : All components are active or exempted.

United States - TSCA 12(b) - Chemical export notification:

One time notification

SARA 302/304

nonane

SARA 304 RQ : Not applicable.

Composition/information on ingredients

No products were found.

SARA 311/312

Section 15. Regulatory information

Classification	: FLAMMABLE LIQUIDS - Category 3
	ACUTE TOXICITY (inhalation) - Category 4
	CARCINOGENICITY - Category 1B
	TOXIC TO REPRODUCTION - Category 2
	SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) -
	Category 3
	SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 1
	HNOC - Defatting irritant

Composition/information on ingredients

Name	%	Classification
aphtha (petroleum),	≥20 - ≤50	FLAMMABLE LIQUIDS - Category 4
nydrodesulfurized heavy		SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE)
,		(Narcotic effects) - Category 3
		SPECIFIC TARGET ORGAN TOXICITY (REPEATED
		EXPOSURE) - Category 1
		ASPIRATION HAZARD - Category 1
		HNOC - Defatting irritant
nonane	≥1.0 - ≤5.0	FLAMMABLE LIQUIDS - Category 3
Ionane	=1.0 = =0.0	ACUTE TOXICITY (inhalation) - Category 4
		SKIN IRRITATION - Category 2
		SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE
		(Narcotic effects) - Category 3
		ASPIRATION HAZARD - Category 1
		HNOC - Defatting irritant
1,2,4-trimethylbenzene	≥1.0 - ≤3.3	FLAMMABLE LIQUIDS - Category 3
		ACUTE TOXICITY (inhalation) - Category 4
		SKIN IRRITATION - Category 2
		EYE IRRITATION - Category 2A
		SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE
		(Respiratory tract irritation) - Category 3
		HNOC - Defatting irritant
Talc , not containing asbestiform	≥1.0 - ≤5.0	SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE
fibres		(Respiratory tract irritation) - Category 3
kylene	≤1.6	FLAMMABLE LIQUIDS - Category 3
,		ACUTE TOXICITY (dermal) - Category 4
		ACUTE TOXICITY (inhalation) - Category 4
		SKIN IRRITATION - Category 2
		EYE IRRITATION - Category 2A
		SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE
		(Respiratory tract irritation) - Category 3
		ASPIRATION HAZARD - Category 1
2-ethylhexanoic acid, zirconium	≤1.0	COMBUSTIBLE DUSTS
-	51.0	
salt	-1.0	TOXIC TO REPRODUCTION - Category 2
ethylbenzene	<1.0	FLAMMABLE LIQUIDS - Category 2
		ACUTE TOXICITY (inhalation) - Category 4
		CARCINOGENICITY - Category 2
		SPECIFIC TARGET ORGAN TOXICITY (REPEATED
		EXPOSURE) - Category 2
		ASPIRATION HAZARD - Category 1
		HNOC - Defatting irritant
neodecanoic acid, cobalt salt	<1.0	ACUTE TOXICITY (oral) - Category 4

Product name SIGMARINE 48 RED / SIGMA 6188

Section 15. Regulatory information

		SKIN SENSITIZATION - Category 1B
		CARCINOGENICITY - Category 1B
		SPECIFIC TARGET ORGAN TOXICITY (REPEATED
		EXPOSURE) - Category 1
cumene	<1.0	FLAMMABLE LIQUIDS - Category 3
		ACUTE TOXICITY (oral) - Category 4
		CARCINOGENICITY - Category 1B
		SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE)
		(Respiratory tract irritation) - Category 3
		SPECIFIC TARGET ORGAN TOXICITY (REPEATED
		EXPOSURE) - Category 2
		ASPIRATION HAZARD - Category 1
		HNOC - Defatting irritant
calcium bis(2-ethylhexanoate)	<1.0	SERIOUS EYE DAMAGE - Category 1
, , ,		TOXIC TO REPRODUCTION - Category 2
calcium bis(2-ethylhexanoate)	<1.0	HNOC - Defatting irritant SERIOUS EYE DAMAGE - Category 1

SARA 313

	Chemical name	CAS number	Concentration
Supplier notification	: 1,2,4-trimethylbenzene	95-63-6	1 - 5
	xylene	1330-20-7	1 - 5
	ethylbenzene	100-41-4	0.1 - 1
	neodecanoic acid, cobalt salt	27253-31-2	0.1 - 1
	cumene	98-82-8	0.1 - 1

SARA 313 notifications must not be detached from the SDS and any copying and redistribution of the SDS shall include copying and redistribution of the notice attached to copies of the SDS subsequently redistributed.

Additional environmental information is contained on the Environmental Data Sheet for this product, which can be obtained from your PPG representative.

California Prop. 65

WARNING: Cancer - www.P65Warnings.ca.gov.

Section 16. Other information

Hazardous Material Information System (U.S.A.)

Health : 3 * Flammability : 2 Physical hazards : 0 (*) - Chronic effects

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings and the associated label are not required on MSDSs or products leaving a facility under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered trademark and service mark of the American Coatings Association, Inc.

The customer is responsible for determining the PPE code for this material. For more information on HMIS® Personal Protective Equipment (PPE) codes, consult the HMIS® Implementation Manual.

National Fire Protection Association (U.S.A.)

Health : 3Flammability : 2Instability : 0Date of previous issue: 7/16/2021Organization that prepared: EHSthe SDS

Product name SIGMARINE 48 RED / SIGMA 6188

Section 16. Other information

Key to abbreviations	: 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)
	N/A = Not available
	SGG = Segregation Group
	UN = United Nations

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.