SAFETY DATA SHEET

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier	
Product name	

Product code

- : Metagard L574 Blast Primer Base
- : L574B

Material uses	Paint or paint related material.Industrial use only.					
1.3 Details of the supplier of sheet	f the safety data					
Sherwin-Williams Protective Tower Works Kestor Street Bolton BL2 2AL United Kingdom +44 (0) 1204 521771	& Marine					
e-mail address of person responsible for this SDS	: hse.pm.emea@sherwin.com					
1.4 Emergency telephone n	1.4 Emergency telephone number					
National advisory body/Po	ison Centre					
Telephone number	: 0844 892 0111					
<u>Supplier</u>						
Telephone number	: +(44)-870-8200 418					
Hours of operation	: Emergency contact available 24 hours a day					

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

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture Product definition : Mixture Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS] Flam. Liq. 2, H225 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Repr. 2, H361d (Unborn child) STOT SE 3, H336 STOT RE 2, H373 Asp. Tox. 1, H304 Aquatic Acute 1, H400 Aquatic Chronic 2, H411 The product is classified as hazardous according to Regulation (EC) 1272/2008 as amended. See Section 16 for the full text of the H statements declared above. See Section 11 for more detailed information on health effects and symptoms.

2.2 Label elements

Metagard L574 Blast Primer - Base	
L 574B	

SECTION 2: Hazards ide	ntification
Hazard pictograms	
Signal word	: Danger
Hazard statements	 Highly flammable liquid and vapour. Causes serious eye irritation. Causes skin irritation. Suspected of damaging the unborn child. May be fatal if swallowed and enters airways. May cause drowsiness or dizziness. May cause damage to organs through prolonged or repeated exposure. Very toxic to aquatic life. Toxic to aquatic life with long lasting effects.
Precautionary statements	
Prevention	: Obtain special instructions before use. Wear protective gloves. Wear eye or face protection. Wear protective clothing. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use explosion-proof electrica ventilating, lighting and all material-handling equipment. Avoid release to the environment. Do not breathe vapour.
Response	: IF INHALED: Remove person to fresh air and keep comfortable for breathing. IF SWALLOWED: Immediately call a POISON CENTER or physician. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
Storage	: Keep cool.
Disposal	: Dispose of contents and container in accordance with all local, regional, national and international regulations.
Hazardous ingredients	: Toluene 2-Propanol
Supplemental label elements	: Contains epoxy constituents. May produce an allergic reaction. FOR INDUSTRIAL USE ONLY
Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles	: Not applicable.
Special packaging requirem	ients

2.3 Other hazards

Other hazards which do : None known. not result in classification

The mixture may be a skin sensitiser. It may also be a skin irritant and repeated contact may increase this effect.

SECTION 3: Composition/information on ingredients

:

3.2 Mixture

SECTION 3: Composition/information on ingredients

			Classification	
Product/ingredient name	Identifiers	%	Regulation (EC) No. 1272/2008 [CLP]	Туре
Toluene	REACH #: 01-2119471310-51 EC: 203-625-9 CAS: 108-88-3 Index: 601-021-00-3	≥25 - <50	Flam. Liq. 2, H225 Skin Irrit. 2, H315 Repr. 2, H361d (Unborn child) STOT SE 3, H336 STOT RE 2, H373 Asp. Tox. 1, H304	[1] [2]
Zinc Phosphate	EC: 231-944-3 CAS: 7779-90-0 Index: 030-011-00-6	≥10 - <25	Aquatic Acute 1, H400 Aquatic Chronic 1, H410	[1]
2-Propanol	REACH #: 01-2119457558-25 EC: 200-661-7 CAS: 67-63-0 Index: 603-117-00-0	≥10 - <25	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336 See Section 16 for the full text of the H statements declared above.	[1] [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, are PBTs or vPvBs or have been assigned a workplace exposure limit and hence require reporting in this section.

<u>Type</u>

[1] Substance classified with a health or environmental hazard

[2] Substance with a workplace exposure limit

[3] Substance meets the criteria for PBT according to Regulation (EC) No. 1907/2006, Annex XIII

[4] Substance meets the criteria for vPvB according to Regulation (EC) No. 1907/2006, Annex XIII

[5] Substance of equivalent concern

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

SECTION 4: First aid measures

4.1 Description of first aid me	easures
General	In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and seek medical advice.
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 recognised skin cleanser. Do NOT use solvents or thinners.
Ingestion	 If swallowed, seek medical advice immediately and show the container or label. Keep person warm and at rest. Do NOT induce vomiting.
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.

4.2 Most important symptoms and effects, both acute and delayed

L574B

pe

SECTION 4: First aid measures

There are no data available on the mixture itself. Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]. See Sections 2 and 3 for details.

Exposure to component solvent vapour 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. Repeated or prolonged contact with the mixture may cause removal of natural fat from the skin, resulting in non-allergic contact dermatitis and absorption through the skin.

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.

Based on the properties of the epoxy constituent(s) and considering toxicological data on similar mixtures, this mixture may be a skin sensitiser and an irritant. It contains low molecular weight epoxy constituents which are irritating to eyes, mucous membrane and skin. Repeated skin contact may lead to irritation and to sensitisation, possibly with cross-sensitisation to other epoxies. Skin contact with the mixture and exposure to spray mist and vapour should be avoided.

4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician	 Treat symptomatically. Contact poison treatment specialist immediately if larg quantities have been ingested or inhaled. 	е
Specific treatments	No specific treatment.	

See toxicological information (Section 11)

SECTION 5: Firefighting	j m	leasures
5.1 Extinguishing media Suitable extinguishing media	:	Recommended: alcohol-resistant foam, carbon dioxide, powders.
Unsuitable extinguishing media	:	Do not use water jet.
5.2 Special hazards arising f	fror	n the substance or mixture
Hazards from the substance or mixture	:	Fire will produce dense black smoke. Exposure to decomposition products may cause a health hazard.
Hazardous thermal decomposition products	:	Decomposition products may include the following materials: carbon monoxide, carbon dioxide, smoke, oxides of nitrogen.
5.3 Advice for firefighters		
Special protective actions for fire-fighters	:	Cool closed containers exposed to fire with water. Do not release runoff from fire to drains or watercourses.
Special protective equipment for fire-fighters		Fire-fighters should wear positive pressure self-contained breathing apparatus (SCBA) and full turnout gear.
SECTION 6: Accidental	rel	ease measures
6.1 Personal precautions, pr	ote	ctive equipment and emergency procedures
For non-emergency	:	Exclude sources of ignition and ventilate the area. Avoid breathing vapour or mist.

or non-emergency	: Exclude sources of ignition and ventilate the area. Avoid breathing vapour or mist.
ersonnel	Refer to protective measures listed in sections 7 and 8.

Keep unnecessary and unprotected personnel from entering.

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SECTION 6: Accidental release measures

For emergency responders	:	If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
6.2 Environmental precautions	:	Do not allow to enter drains or watercourses. If the product contaminates lakes, rivers, or sewers, inform the appropriate authorities in accordance with local regulations.
6.3 Methods and material for containment and cleaning up	:	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). Preferably clean with a detergent. Avoid using solvents.
6.4 Reference to other sections	:	See Section 1 for emergency contact information. See Section 8 for information on appropriate personal protective equipment. See Section 13 for additional waste treatment information.

SECTION 7: Handling and storage

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

7.1 Precautions for safe handling	 Prevent the creation of flammable or explosive concentrations of vapours in air and avoid vapour concentrations higher than the occupational exposure limits. In addition, the product should only be used in areas from which all naked lights and other sources of ignition have been excluded. Electrical equipment should be protected to the appropriate standard. Mixture may charge electrostatically: always use earthing leads when transferring from one container to another. Operators should wear antistatic footwear and clothing and floors should be of the conducting type. Keep away from heat, sparks and flame. No sparking tools should be used. Avoid contact with skin and eyes. Avoid the inhalation of dust, particulates, spray or mist arising from the application of this mixture. Avoid inhalation of dust from sanding. Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Put on appropriate personal protective equipment (see Section 8). Never use pressure to empty. Container is not a pressure vessel. Always keep in containers made from the same material as the original one. Comply with the health and safety at work laws. Do not allow to enter drains or watercourses. Information on fire and explosion protection Vapours are heavier than air and may spread along floors. Vapours may form explosive mixtures with air. When operators, whether spraying or not, have to work inside the spray booth, ventilation is unlikely to be sufficient to control particulates and solvent vapour in all cases. In such circumstances they should wear a compressed air-fed respirator during the spraying process and until such time as the particulates and solvent vapour concentration has fallen below the exposure limits.
7.2 Conditions for safe storage, including any incompatibilities	 Store in accordance with local regulations. Notes on joint storage Keep away from: oxidising agents, strong alkalis, strong acids. Additional information on storage conditions Observe label precautions. Store in a dry, cool and well-ventilated area. Keep away from heat and direct sunlight. Keep away from sources of ignition. No smoking. Prevent unauthorised access. Containers that have been opened must be carefully resealed and kept upright to prevent leakage.

SECTION 7: Handling and storage

Contaminated absorbent material may pose the same hazard as the spilt product. Store in closed original container at temperatures between 5°C and 25°C.

Seveso Directive - Reporting thresholds (in tonnes)

Danger criteria

Category	Notification and MAPP threshold	Safety report threshold
P5c: Flammable liquids 2 and 3 not falling under P5a or P5b E1: Hazardous to the aquatic environment - Acute 1 or Chronic 1	5000 100	50000 200
C7b: Highly flammable (R11) C9ii: Toxic for the environment	5000 200	50000 500

7.3 Specific end use(s)

Recommendations: Not available.Industrial sector specific: Not available.

solutions

Good housekeeping standards, regular safe removal of waste materials and regular maintenance of spray booth filters will minimise the risks of spontaneous combustion and other fire hazards.

Before use of this material please refer to the Exposure Scenario(s) if attached for the specific end use, control measures and additional PPE considerations.

SECTION 8: Exposure controls/personal protection

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

8.1 Control parameters

Occupational exposure limits

Product/ingredient name		Exposure limit values		
Toluene		EH40/2005 WELs (United Kingdom (UK), 12/2011). Absorbed through skin.		
2-Propanol		STEL: 384 mg/m ³ 15 minutes. TWA: 191 mg/m ³ 8 hours. TWA: 50 ppm 8 hours. STEL: 100 ppm 15 minutes. EH40/2005 WELs (United Kingdom (UK), 12/2011). STEL: 1250 mg/m ³ 15 minutes. STEL: 500 ppm 15 minutes. TWA: 999 mg/m ³ 8 hours. TWA: 400 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 effectivenes of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards, such a the following: European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with 			

limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment

(Workplace atmospheres - General requirements for the performance of procedures

documents for methods for the determination of hazardous substances will also be

6/15

of exposure to chemical and biological agents) European Standard EN 482

for the measurement of chemical agents) Reference to national guidance

SECTION 8: Exposure controls/personal protection

No DNELs/DMELs available.

PNECs

No PNECs available

8.2 Exposure controls		
Appropriate engineering controls	: Provide adequate ventilation. Where reasonably practicable, this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and solvent vapours below the OEL, suitable respiratory protection must be worn.	
	: Users are advised to consider national Occupational Exposure Limits or other equivalent values.	
Individual protection meas	<u>es</u>	
Hygiene measures	: Wash hands, forearms and face thoroughly after handling chemical products, be 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	: Use safety eyewear designed to protect against splash of liquids.	
Skin protection		
Hand protection	: Wear suitable gloves tested to EN374.	
Gloves	: Short Term Exposure less than 10 minutes Continuous use Nitrile gloves. Hazardous ingredients Section 3 For more than 4 hours of protection in the presence of Ethyl methyl ketone or Methyl ethyl ketone Acetone or Methyl isobut ketone Butyl gloves 0.7mm For more than 4 hours of protection in the presence of Aromatic solvent use polyvinyl alcohol (PVA) gloves.	
	Long Term Exposure Spill / For prolonged or repeated handling, use PE / PE Laminate gloves > 8 hours (breakthrough time) .	
	There is no one glove material or combination of materials that will give unlimited resistance to any individual or combination of chemicals. The breakthrough time must be greater than the end use time of the product. The instructions and information provided by the glove manufacturer on use, storage, maintenance and replacement must be followed. Gloves should be replaced regularly and if there is any sign of damage to the glo material. Always ensure that gloves are free from defects and that they are stored and use	ove
	correctly. The performance or effectiveness of the glove may be reduced by physical/chem damage and poor maintenance. Barrier creams may help to protect the exposed areas of the skin but should not applied once exposure has occurred.	
	The user must check that the final choice of type of glove selected for handling the product is the most appropriate and takes into account the particular conditions of use, as included in the user's risk assessment.	
Body protection	: Personnel should wear antistatic clothing made of natural fibres or of high- temperature-resistant synthetic fibres.	
	: 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 electricit wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves. Refer European Standard EN 1149 for further information on material and design requirements and test methods.	ÿ,
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. 	е

SECTION 8: Exposure controls/personal protection

Respiratory protection	: Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary. Recommended: A2P2 (EN14387). 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.
Environmental exposure controls	: Do not allow to enter drains or watercourses.

Before use of this material please refer to the Exposure Scenario(s) if attached for the specific end use, control measures and additional PPE considerations. The information contained in this safety data sheet does not constitute the user's own assessment of workplace risks, as required by other health and safety legislation. The provisions of the national health and safety at work regulations apply to the use of this product at work.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical	and chemical properties
<u>Appearance</u>	
Physical state	: Liquid.
Colour	: Various
Odour	: Paint
Odour threshold	: Not Available (Not Tested).
рН	: Testing not technically possible.
Melting point/freezing point	Not Available (Not Tested).
Initial boiling point and boiling range	: 81°C
Flash point	: Closed cup: 9°C [Pensky-Martens Closed Cup]
Evaporation rate	: 2 (butyl acetate = 1)
Flammability (solid, gas)	: Not Available (Not Tested).
Burning time	Not Available (Not Tested).
Burning rate	Not Available (Not Tested).
Upper/lower flammability or explosive limits	: Lower: 1% Upper: 12.7%
Vapour pressure	: 0.59 kPa [at 20°C]
Vapour density	: 2.07 [Air = 1]
Relative density	: 1.27
Solubility(ies)	Not Available (Not Tested).
Solubility in water	: Not Available (Not Tested).
Partition coefficient: n-octanol/ water	Not Available (Not Tested).
Auto-ignition temperature	: Not Available (Not Tested).
Decomposition temperature	Not Available (Not Tested).
Viscosity	: Kinematic (room temperature): <0.205 cm ² /s Kinematic (40°C): >0.07 cm ² /s
Explosive properties	
Oxidising properties	: Under normal conditions of storage and use, hazardous reactions will not occur.
9.2 Other information Heat of combustion	: 13.13 kJ/g

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SECTION 10: Stability and reactivity

y		,
10.1 Reactivity		No specific test data related to reactivity available for this product or its ingredients.
10.2 Chemical stability		Stable under recommended storage and handling conditions (see Section 7).
10.3 Possibility of hazardous reactions		Under normal conditions of storage and use, hazardous reactions will not occur.
10.4 Conditions to avoid		 When exposed to high temperatures may produce hazardous decomposition products.
10.5 Incompatible materials		 Keep away from the following materials to prevent strong exothermic reactions: oxidising agents, strong alkalis, strong acids.
10.6 Hazardous decomposition products		 Under normal conditions of storage and use, hazardous decomposition products should not be produced.
Defer to Cootier 7. HANDIN	5	AND STORAGE and Section & EXPOSURE CONTROL S/REPSONAL

Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

There are no data available on the mixture itself. Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]. See Sections 2 and 3 for details.

Exposure to component solvent vapour 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. Repeated or prolonged contact with the mixture may cause removal of natural fat from the skin, resulting in non-allergic contact dermatitis and absorption through the skin.

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.

Based on the properties of the epoxy constituent(s) and considering toxicological data on similar mixtures, this mixture may be a skin sensitiser and an irritant. It contains low molecular weight epoxy constituents which are irritating to eyes, mucous membrane and skin. Repeated skin contact may lead to irritation and to sensitisation, possibly with cross-sensitisation to other epoxies. Skin contact with the mixture and exposure to spray mist and vapour should be avoided.

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Toluene	LC50 Inhalation Vapour	Rat	49 g/m ³	4 hours
2-Propanol	LD50 Oral LD50 Dermal	Rat Rabbit	636 mg/kg 12800 mg/kg	-
	LD50 Oral	Rat	5000 mg/kg	-

Acute toxicity estimates

No data available

Irritation/Corrosion

SECTION 11: Toxicological information

Product/ingredient name	Result	Species	Score	Exposure	Observation
Toluene	Eyes - Mild irritant	Rabbit	-	0.5 minutes 100 milligrams	-
	Eyes - Mild irritant	Rabbit	-	870 Micrograms	-
	Eyes - Severe irritant	Rabbit	-	24 hours 2 milligrams	-
	Skin - Mild irritant	Pig	-	24 hours 250 microliters	-
	Skin - Mild irritant	Rabbit	-	435 milligrams	-
	Skin - Moderate irritant	Rabbit	-	24 hours 20 milligrams	-
	Skin - Moderate irritant	Rabbit	-	500 milligrams	-
2-Propanol	Eyes - Moderate irritant	Rabbit	-	24 hours 100 milligrams	-
	Eyes - Moderate irritant	Rabbit	-	10 milligrams	-
	Eyes - Severe irritant	Rabbit	-	100 milligrams	-
	Skin - Mild irritant	Rabbit	-	500 milligrams	-

Conclusion/Summary

: Not available.

Sensitisation

No data available

Conclusion/Summary

: Not available.

<u>Mutagenicity</u>

No data available

Carcinogenicity

No data available

Reproductive toxicity

No data available

Teratogenicity

No data available

Specific target organ toxicity (single exposure)

Product/ingredient name	Category	Route of exposure	Target organs
Toluene	Category 3	Not applicable.	Narcotic effects
2-Propanol	Category 3	Not applicable.	Narcotic effects

Specific target organ toxicity (repeated exposure)

Product/ingredient name	Category	Route of exposure	Target organs
Toluene	Category 2	Not determined	Not determined

Aspiration hazard

Product/ingredient name	Result
Toluene	ASPIRATION HAZARD - Category 1

Other information

: Not available.

SECTION 12: Ecological information

12.1 Toxicity

There are no data available on the mixture itself. Do not allow to enter drains or watercourses.

Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]. See Sections 2 and 3 for details.

Product/ingredient name	Result	Species	Exposure
Toluene	Acute EC50 12500 µg/l Fresh water	Algae - Pseudokirchneriella subcapitata	72 hours
	Acute EC50 11600 µg/l Fresh water	Crustaceans - Gammarus pseudolimnaeus - Adult	48 hours
	Acute EC50 6000 μg/l Fresh water	Daphnia - Daphnia magna - Juvenile (Fledgling, Hatchling, Weanling)	48 hours
	Acute LC50 5500 µg/l Fresh water	Fish - Oncorhynchus kisutch -	96 hours
Zinc Phosphate 2-Propanol	Chronic NOEC 1000 µg/l Fresh water Acute LC50 0.268 mg/l Acute LC50 1400000 µg/l Marine water Acute LC50 4200 mg/l Fresh water	Daphnia - Daphnia magna Algae	21 days 96 hours 48 hours 96 hours

12.2 Persistence and degradability

Product/ingredient name	Test	Result		Dose		Inoculum
No data available						
Conclusion/Summary	: Not available.	•				
Product/ingredient name	Aquatic half-life		Photolysis		Biodeg	radability
Toluene	-		-		Readily	

12.3 Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
Toluene	-	90	low
Zinc Phosphate	-	60960	high

12.4 Mobility in soil

2-Propanol

Soil/water partition coefficient (Koc)	: Not available.
Mobility	: Not available.

12.5 Results of PB	T and vPvB	assessment
--------------------	------------	------------

Not applicable.

vPvB : Not applicable.

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

: Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

Readily

SECTION 13: Disposal considerations

13.1 Waste treatment methods

. .

Product	
Methods of disposal	: 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.
Hazardous waste	: Yes.
European waste catalogue (EWC)	 waste paint and varnish containing organic solvents or other dangerous substances 08 01 11*
Disposal considerations	 Do not allow to enter drains or watercourses. Dispose of according to all federal, state and local applicable regulations. If this product is mixed with other wastes, the original waste product code may no longer apply and the appropriate code should be assigned. For further information, contact your local waste authority.
Packaging	
Methods of disposal	: The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.
Disposal considerations	: Using information provided in this safety data sheet, advice should be obtained from the relevant waste authority on the classification of empty containers. Empty containers must be scrapped or reconditioned. Dispose of containers contaminated by the product in accordance with local or national legal provisions.
European waste catalogue (EWC)	 packaging containing residues of or contaminated by dangerous substances 15 01 10*
Special precautions	: 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. Vapour 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 spilt material and runoff and contact with soil, waterways, drains and sewers.

SECTION 14: Transport information

	ADR/RID	IMDG	ΙΑΤΑ
14.1 UN number	UN1263	UN1263	UN1263
14.2 UN proper shipping name	PAINT	PAINT. Marine pollutant (Zinc Phosphate)	PAINT
14.3 Transport Hazard Class(es)/ Label(s)			3
14.4 Packing group	11	11	11
14.5 Environmental hazards	Yes.	Yes.	No.
Date of issue/Date of rev	ision : 23, Feb, 2016.	Date of previous issue : 29, May, 201	5. Version : 2 12/

SECTION 14: Transport information

SECTION 14: Transport mormation				
Additional information	The environmentally hazardous substance mark is not required when transported in sizes of ≤5 L or ≤5 kg.	The marine pollutant mark is not required when transported in sizes of ≤5 L or ≤5 kg.	The environmentally hazardous substance mark may appear if required by other transportation	
	Special provisions 640 (C) Tunnel code D/E	Emergency schedules (EmS) F-E, S-E Special provisions Not Applicable	regulations. <u>Special provisions</u> Not Applicable	

user

14.6 Special precautions for : 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.

14.7 Transport in bulk : Not applicable. according to Annex II of MARPOL 73/78 and the IBC Code

Multi-modal shipping descriptions are provided for informational purposes and do not consider container sizes. The presence of a shipping description for a particular mode of transport (sea, air, etc.), does not indicate that the product is packaged suitably for that mode of transport. All packaging must be reviewed for suitability prior to shipment, and compliance with the applicable regulations is the sole responsibility of the person offering the product for transport. People loading and unloading dangerous goods must be trained on all of the risks deriving from the substances and on all actions in case of emergency situations.

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture EU Regulation (EC) No. 1907/2006 (REACH)

Annex XIV - List of substances subject to authorisation

Annex XIV

None of the components are listed.

Substances of very high concern

None of the components are listed.

Annex XVII - Restrictions : Not applicable. on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles

Other EU regulations

VOC content (2010/75/EU) : 46.5 w/w

593 g/l

National regulations

15.2 Chemical Safety : No Chemical Safety Assessment has been carried out. Assessment

SECTION 16: Other information

Indicates information that has changed from previously issued version.					
Abbreviations and acronyms	 ATE = Acute Toxicity Estimate CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008] DMEL = Derived Minimal Effect Level DNEL = Derived No Effect Level EUH statement = CLP-specific Hazard statement PBT = Persistent, Bioaccumulative and Toxic PNEC = Predicted No Effect Concentration RRN = REACH Registration Number vPvB = Very Persistent and Very Bioaccumulative 				
Key literature references and sources for data	 Regulation (EC) No. 1272/2008 [CLP] ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road DPD = Dangerous Preparations Directive [1999/45/EC] DSD = Dangerous Substances Directive [67/548/EEC] IATA = International Air Transport Association IMDG = International Maritime Dangerous Goods Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Regulation (EU) No. 453/2010 Directive 96/82/EC, and relative amendments & additions Directive 2008/98/EC, and relative amendments & additions Directive 2000/39/EC, and relative amendments & additions CEPE Guidelines 				

Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Class	sification	Justification
Flam. Liq. 2, H225 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Repr. 2, H361d (Unborn chi STOT SE 3, H336 STOT RE 2, H373 Asp. Tox. 1, H304 Aquatic Acute 1, H400 Aquatic Chronic 2, H411	ld)	On basis of test data Calculation method Calculation method Calculation method Calculation method Calculation method Calculation method Calculation method
Full text of abbreviated H statements	H304 May be H315 Causes H319 Causes H336 May ca H361d (Unborn Suspec child) H373 May ca exposu H400 Very to H410 Very to	flammable liquid and vapour. a fatal if swallowed and enters airways. a skin irritation. a serious eye irritation. use drowsiness or dizziness. a drowsiness or dizziness. a drowsiness or dizziness. a drowsiness or dizziness. b damage to organs through prolonged or repeated re. xic to aquatic life. xic to aquatic life with long lasting effects. b aquatic life with long lasting effects.
Full text of classifications [CLP/GHS]	: Aquatic Acute 1, H400 Aquatic Chronic 1, H410 Aquatic Chronic 2, H411 Asp. Tox. 1, H304 Eye Irrit. 2, H319 Flam. Liq. 2, H225 Repr. 2, H361d (Unborn child) Skin Irrit. 2, H315 STOT RE 2, H373	ACUTE AQUATIC HAZARD - Category 1 LONG-TERM AQUATIC HAZARD - Category 1 LONG-TERM AQUATIC HAZARD - Category 2 ASPIRATION HAZARD - Category 2 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2 FLAMMABLE LIQUIDS - Category 2 TOXIC TO REPRODUCTION (Unborn child) - Category 2 SKIN CORROSION/IRRITATION - Category 2 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2
Date of issue/Date of revision	: 23, Feb, 2016. Date of p	previous issue : 29, May, 2015. Version : 2 14/15

Metagard L574 Blast Primer - Base	
L574B	

SECTION 16: Other information

	STOT SE 3, H336	SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3	
Date of printing	: 23, Feb, 2016.		
Date of issue/ Date of revision	: 23, Feb, 2016.		
Date of previous issue	: 29, May, 2015.		
	: If there is no previous v information.	alidation date please contact your supplier for more	
Version	: 2		

Notice to reader

It is recommended that each customer or recipient of this Safety Data Sheet (SDS) study it carefully and consult resources, as necessary or appropriate, to become aware of and understand the data contained in this SDS and any hazards associated with the product. This information is provided in good faith and believed to be accurate as of the effective date herein. However, no warranty, express or implied, is given. The information presented here applies only to the product as shipped. The addition of any material can change the composition, hazards and risks of the product. Regulatory requirements are subject to change and may differ between various locations and jurisdictions. The customer/buyer/user is responsible to ensure that his activities comply with all country, federal, state, provincial or local laws. The conditions for use of the product for any purpose other than the purpose shown in the applicable section of this SDS without first referring to the supplier and obtaining written handling instructions. Due to the proliferation of sources for information such as manufacturer-specific SDS, the manufacturer cannot be responsible for SDSs obtained from any other source.