RUST-OLEUM MATHYS

SAFETY DATA SHEET

5421 Epoxy Floor Primer Rapid - Activator

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Product name and/or code : 5421 Epoxy Floor Primer Rapid - Activator

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2. HAZARDS IDENTIFICATION

The product is classified as dangerous according to Directive 1999/45/EC and its amendments.

Classification : Xn; R20/22
C; R34
R43
R52/53

Human health hazards : Harmful by inhalation and if swallowed. Causes burns. May cause sensitization by skin contact.

Environmental hazards : Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substances presenting a health or environmental hazard within the meaning of the Dangerous Substances Directive 67/548/EEC.

Chemical name	CAS #	%	EU no.	Classification	
m-phenylenebis(methylamine)	1477-55-0	25 - 50	216-032-5	Xn; R20/22 C; R34 R43 R52/53	[1]
4-tert-butylphenol	98-54-4	10 - 25	202-679-0	Xi; R36/37/38	[1]
benzyl alcohol	100-51-6	10 - 25	202-859-9	Xn; R20/22	[1]
cyclo-aliphatic polyamine adduct n.o.s.	-	10 - 25		Xi; R38	[1]
3-aminomethyl-3,5,5-trimethylcyclohexylamine	2855-13-2	10 - 25	220-666-8	Xn; R21/22 C; R34 R43 R52/53	[1]
trimethylhexane-1,6-diamine	25620-58-0	5 - 10	247-134-8	Xn; R22 C; R35 R43 R52/53	[1]

See Section 16 for the full text of the R-phrases declared above.

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.

[1] Substance classified with a health or environmental hazard

[2] Substance with a workplace exposure limit

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

4. FIRST AID MEASURES

First aid measures

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.

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.

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.

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

5. FIRE-FIGHTING MEASURES

Extinguishing media : Recommended: alcohol-resistant foam, CO_2, powders, water spray.

Recommendations : Fire will produce dense black smoke. Exposure to decomposition products may cause a health hazard. Appropriate breathing apparatus may be required.
Cool closed containers exposed to fire with water. Do not release runoff from fire to drains or watercourses.

Hazardous combustion products : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
nitrogen oxides

6. ACCIDENTAL RELEASE MEASURES

Personal precautions : Exclude sources of ignition and ventilate the area. Avoid breathing vapor or mist. Refer to protective measures listed in sections 7 and 8.

Spill : 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.

Note: see section 8 for personal protective equipment and section 13 for waste disposal.

7. HANDLING AND STORAGE

Handling : 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 preparation. 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.

Storage : Store in accordance with local regulations.
Notes on joint storage
Keep away from: oxidizing 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 unauthorized access. Containers that have been opened must be carefully resealed and kept upright to prevent leakage.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering measures : 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 vapors below the OEL, suitable respiratory protection must be worn.

Occupational exposure limits : Not available.

Exposure controls/personal protection

Occupational exposure controls : Use only with adequate ventilation. If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

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.

Respiratory protection : Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. 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.

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.
Barrier creams may help to protect the exposed areas of the skin but should not be applied once exposure has occurred. The user must check that the final choice of type of glove selected for handling this product is the most appropriate and takes into account the particular conditions of use, as included in the user's risk assessment.

Eye protection : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists or dusts.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Skin 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.

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.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state : Liquid.

Odor : Fish.

Color : Yellow.

Flash point : Closed cup: >100°C (>212°F)

Boiling point : >200°C (>392°F)

Relative density (kg/L) : 1.02

10. STABILITY AND REACTIVITY

Stable under recommended storage and handling conditions (see section 7).

Hazardous decomposition products: carbon monoxide, carbon dioxide, smoke, oxides of nitrogen.

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

11. TOXICOLOGICAL INFORMATION

There are no data available on the preparation itself. The preparation has been assessed following the conventional method of the Dangerous Preparations Directive 1999/45/EC and classified for toxicological hazards accordingly. See sections 3 and 15 for details.

Corrosive to eyes and skin.
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.

Contains m-Xylylenediamine, 3-aminomethyl-3,5,5-trimethylcyclohexylamine, trimethylhexane-1,6-diamine. May produce an allergic reaction.

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
m-phenylenebis(methylamine)	LD50 Dermal	Rabbit	2 g/kg	-
	LD50 Oral	Rat	930 mg/kg	-
	LC50 Inhalation Dusts and mists	Rat	1900 mg/m³	1 hours
	LC50 Inhalation Gas.	Rat	700 ppm	1 hours
4-tert-butylphenol	LD50 Dermal	Rabbit	2520 uL/kg	-
	LD50 Intraperitoneal	Rat	225 mg/kg	-
	LD50 Oral	Rat	3250 uL/kg	-
	LCLo Inhalation Dusts and mists	Rat	5600 mg/m³	4 hours
benzyl alcohol	LD50 Dermal	Rabbit	2000 mg/kg	-
	LD50 Oral	Rat	1.5 mL/kg	-
	LD50 Oral	Rat	1230 mg/kg	-
	LDLo Intraperitoneal	Rat	650 mg/kg	-
	LC50 Inhalation Vapor	Rat	>4178 mg/l	4 hours
3-aminomethyl-3,5,5-trimethylcyclohexylamine	LD50 Oral	Rat	1030 mg/kg	-
trimethylhexane-1,6-diamine	LD50 Oral	Rat	910 mg/kg	-

Carcinogenicity

Product/ingredient name	Result	Species	Dose	Exposure
benzyl alcohol	Negative - Oral - TD	Rat	-	103 weeks; 5 days per week

Teratogenicity

Product/ingredient name	Result	Species	Dose	Exposure
benzyl alcohol	Negative - Unreported	Mouse - Female	550 mg/kg	-

12. ECOLOGICAL INFORMATION

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

The preparation has been assessed following the conventional method of the Dangerous Preparations Directive 1999/45/EC and is classified for eco-toxicological properties accordingly. See sections 2 and 15 for details.

Aquatic ecotoxicity

Ingredient name	Result	Species	Exposure
m-phenylenebis(methylamine)	Acute EC50 10 to 100 mg/l	Daphnia - Goldfish (carassius auratus)	48 hours
	Acute LC50 >100 mg/l	Fish	96 hours
4-tert-butylphenol	Acute EC50 11.2 mg/l	Algae	72 hours
	Acute EC50 4.5 to 3900 ug/L Fresh water	Daphnia - Water flea - Daphnia magna - 6 to 24 hours	48 hours
	Acute LC50 1.5 mg/l	Fish - Golden orfe (leuciscus idus)	48 hours
	Chronic NOEC 2.3 mg/L Fresh water	Fish - common carp - Cyprinus carpio - Adult	28 days
benzyl alcohol	Acute EC50 770 mg/l	Algae	72 hours
	Acute EC50 230 mg/l	Daphnia - Daphnia magna	48 hours
	Acute LC50 646 mg/l	Fish - Leuciscus idus	48 hours
	Acute LC50 460 mg/l Fresh water	Fish - Fathead minnow - Pimephales promelas - Juvenile (Fledgling, Hatchling, Weanling) - 4 to 8 weeks - 1.1 to 3.1 cm	96 hours
	Chronic NOEC 51 mg/l	Daphnia - Daphnia magna	21 days
3-aminomethyl-3,5,5-trimethylcyclohexylamine	Acute EC50 17.4 to 22 mg/L Fresh water	Daphnia - Water flea - Daphnia magna - <24 hours	48 hours
	Acute EC50 37 mg/l	Algae - Desmodesmus subspicatus	72 hours
	Acute LC50 110 mg/l	Fish - Golden orfe (leuciscus idus)	96 hours
	Chronic NOEC 3 mg/l	Daphnia	21 days

Ecological information

Biodegradability

Ingredient name	Test	Result	Dose	Inoculum
benzyl alcohol	OECD 301A	96 % - Readily - 21 days	-	-
3-aminomethyl-3,5,5-trimethylcyclohexylamine	OECD 303A	42 % - Not readily - 3 days	-	-

Conclusion/Remark : Not available.

Ingredient name	Aquatic half-life	Photolysis	Biodegradability
benzyl alcohol	-	-	Readily
3-aminomethyl-3,5,5-trimethylcyclohexylamine	-	-	Not readily

Bioaccumulative potential

Ingredient name	$LogP_{ow}$	BCF	Potential
m-phenylenebis(methylamine)	0.18	2.691534803	low
4-tert-butylphenol	3.42	67.608297539	low
benzyl alcohol	1.1	-	low
3-aminomethyl-3,5,5-trimethylcyclohexylamine	1.9	-	low

13. DISPOSAL CONSIDERATIONS

Do not allow to enter drains or watercourses.
Dispose of according to all federal, state and local applicable regulations.

European waste catalogue (EWC) : The European Waste Catalogue classification of this product, when disposed of as waste, is: 08 01 11* waste paint and varnish containing organic solvents or other dangerous substances. If this product is mixed with other wastes, this code may no longer apply. If mixed with other wastes, the appropriate code should be assigned. For further information, contact your local waste authority.

Hazardous waste : Yes.

14. TRANSPORT INFORMATION

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

International transport regulations

Regulatory information	UN number	Proper shipping name	Classes	PG*	Label	Additional information
ADR/RID Class	2735 LQ	Polyamines, liquid, corrosive, n.o.s. Limited quantity (m-phenylenebis(methylamine))	8	II		**Hazard identification number** 80 **Limited quantity** LQ22 **Special provisions** 274 **Tunnel code** E
IMDG Class	2735 LQ	Polyamines, liquid, corrosive, n.o.s. Limited quantity (m-phenylenebis(methylamine))	8	II		**Emergency schedules (EmS)** F-A, S-B

14. TRANSPORT INFORMATION

IATA Class	2735	Polyamines, liquid, corrosive, n.o.s. (3-aminomethyl-3,5,5-trimethylcyclohexylamine)	8	II		-

PG* : Packing group

15. REGULATORY INFORMATION

EU regulations : The product is classified and labelled for supply in accordance with the Directive 1999/45/EC as follows:

Hazard symbol or symbols :

Corrosive

Risk phrases : R20/22- Harmful by inhalation and if swallowed.
R34- Causes burns.
R43- May cause sensitization by skin contact.
R52/53- Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Safety phrases : S26- In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S35- This material and its container must be disposed of in a safe way.
S36/37/39- Wear suitable protective clothing, gloves and eye/face protection.
S45- In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
S61- Avoid release to the environment. Refer to special instructions/safety data sheet.

Contains : m-phenylenebis(methylamine)
3-aminomethyl-3,5,5-trimethylcyclohexylamine
trimethylhexane-1,6-diamine

VOC for Ready-for-Use Mixture : IIA/g. Primers. EU limit values: 450g/l (2007) 350g/l (2010.)
This product contains a maximum of 27 g/l VOC.

Europe inventory : All components are listed or exempted.

Other EU regulations

CN code : 3909 30 00

Industrial use : 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.

16. OTHER INFORMATION

Full text of R-phrases referred to in sections 2 and 3 - United Kingdom (UK) : R22- Harmful if swallowed.
R20/22- Harmful by inhalation and if swallowed.
R21/22- Harmful in contact with skin and if swallowed.
R34- Causes burns.
R35- Causes severe burns.
R38- Irritating to skin.
R36/37/38- Irritating to eyes, respiratory system and skin.
R43- May cause sensitization by skin contact.
R52/53- Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

The information in this Safety Data Sheet is required pursuant to EU Directive 91/155/EEC and its amendments.

Indicates information that has changed from previously issued version.

Notice to reader

The information in this SDS is based on the present state of our knowledge and on current laws. The product is not to be used for purposes other than those specified under section 1 without first obtaining written handling instructions. It is always the responsibility of the user to take all necessary steps to fulfill the demands set out in the local rules and legislation. The information in this SDS is meant to be a description of the safety requirements for our product. It is not to be considered a guarantee of the product's properties.