

MATERIAL SAFETY DATA SHEET R251 GRAFFITI REMOVER

1. Identification of the substance/mixture and of the company/undertaking

1.1 Product ide	entifier
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Trade name:

GRAFFITI REMOVER

Article number: R251

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

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier:	Tygris Industrial Unit 31 Kyle Road Industrial Estate Irvine Ayshire KA12 8LE Tel +44 (0) 1294 311 066 Fax +44 (0) 1294 277 115 Email technical@tygrisindustrial.com
Further information obtainable from:	Technical Department
1.4 Emergency telephone number:	Tel +44 (0) 1294 311 066



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2. Hazards identification

2.1. Classification of the substance or mixture

Classification	(EC
1272/2008)	

Physical and Chemical Hazards Human health Environment

Flam. Aerosol 1 - H222 EUH066;STOT SE 3 - H336 Not classified.

Classification (1999/45/EEC) F+;R12. R66, R67.

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

2.2. Label elements

Label In Accordance With (EC) No. 1272/2008



Signal Word	Danger
Hazard Statements	H222 Extremely flammable aerosol. H336 May cause drowsiness or dizziness.
Precautionary Statements	 P102 Keep out of reach of children. P210 Keep away from heat/sparks/open flames/hot surfaces No smoking. P271 Use only outdoors or in a well-ventilated area. P261 Avoid breathing vapour/spray. P280 Wear protective gloves. P305+351+338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337+313 If eye irritation persists: Get medical advice/attention. P501 Dispose of contents/container in accordance with local regulations.
Supplementary Precautionary Statements	 P211 Do not spray on an open flame or other ignition source. P251 Pressurized container: Do not pierce or burn, even after use. P302+352 IF ON SKIN: Wash with plenty of soap and water. P304+340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. P312 Call a POISON CENTER or doctor/physician if you feel unwell. P332+313 If skin irritation occurs: Get medical advice/attention. P403+233 Store in a well-ventilated place. Keep container tightly closed. P410+412 Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.
Supplemental label information	EUH066 Repeated exposure may cause skin dryness or cracking.

2.3. Other hazards



3. Composition/information on ingredients

3.2. Mixtures

2-METHOXY-1-METHYLETHYL ACETATE	5-10%
Index No.	REACH Registration No.
CAS-No.: 108-65-6	EC No.: 203-603-9
Classification (EC 1272/2008) Flam. Liq. 3 - H226	Classification (67/548/EEC) R10
ACETONE	10-30%
Index No.	REACH Registration No.
CAS-No.: 67-64-1	EC No.: 200-662-2
Classification (EC 1272/2008) Flam. Liq. 2 - H225 EUH066 Eye Irrit. 2 - H319 STOT SE 3 - H336	Classification (67/548/EEC) F;R11 Xi;R36 R66 R67
BUTANE	5-10%
Index No.	REACH Registration No.
CAS-No.: 106-97-8	EC No.: 203-448-7
Classification (EC 1272/2008) Flam. Gas 1 - H220	Classification (67/548/EEC) F+;R12
BUTYL ACETATE -norm	10-30%
Index No.	REACH Registration No.
CAS-No.: 123-86-4	EC No.: 204-658-1
Classification (EC 1272/2008) Flam. Liq. 3 - H226 EUH066 STOT SE 3 - H336	Classification (67/548/EEC) R10 R66 R67
FATTY ALCOHOL ETHOXYLATE	1-5%
Index No.	REACH Registration No.
CAS-No.:	EC No.:
Classification (EC 1272/2008) Not classified.	Classification (67/548/EEC) Xi;R41.
ISOBUTANE	1-5%
Index No.	REACH Registration No.
CAS-No.: 75-28-5	EC No.: 200-857-2
Classification (EC 1272/2008) Flam. Gas 1 - H220	Classification (67/548/EEC) F+;R12
METHYLAL	5-10%
Index No.	REACH Registration No.
CAS-No.: 109-87-5	EC No.: 203-714-2
Classification (EC 1272/2008) Not classified.	Classification (67/548/EEC) F;R11.



PROPANE	10-30%
Index No.	REACH Registration No.
CAS-No.: 74-98-6	EC No.: 200-827-9
Classification (EC 1272/2008) Flam. Gas 1 - H220	Classification (67/548/EEC) F+;R12

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16

4. First aid measures

4.1. Description of first aid measures

General information	Move the exposed person to fresh air at once. Get medical attention if any discomfort continues.
Inhalation	Move the exposed person to fresh air at once. When breathing is difficult, properly trained personnel may assist affected person by administering oxygen. Keep the affected person warm and at rest. Get prompt medical attention.
Ingestion	DO NOT INDUCE VOMITING! Rinse mouth thoroughly with water and give large amounts of milk or water to people not unconscious. Get medical attention if any discomfort continues.
Skin contact	Wash the skin immediately with soap and water. Get medical attention if any discomfort continues.
Eye contact	Make sure to remove any contact lenses from the eyes before rinsing. Promptly wash eyes with plenty of water while lifting the eye lids. Continue to rinse for at least 15 minutes. Get medical attention if any discomfort continues.

4.2. Most important symptoms and effects, both acute and delayed

4.3. Indication of any immediate medical attention and special treatment needed

5. Firefighting measures

5.1 Extinguishing Media

Extinguishing media Use: Powder. Dry chemicals, sand, dolomite etc. Water spray, fog or mist.

5.2. Special hazards arising from the substance or mixture

Unusual Fire & Explosion Aerosol cans may explode in a fire. **Hazards**

5.3. Advice for firefighters

Special Fire Fighting	Containers close to fire should be removed or cooled with water. Use water to keep
Procedures	fire exposed containers cool and disperse vapours.



6. Accidental release measures

- 6.1. Personal precautions, protective equipment and emergency procedures
- 6.2. Environmental precautions
- 6.3. Methods and material for containment and cleaning up

Wear necessary protective equipment. Extinguish all ignition sources. Avoid sparks, flames, heat and smoking. Ventilate. Let evaporate. Keep out of confined spaces because of explosion risk. If leakage cannot be stopped, evacuate area.

6.4. Reference to other sections

7. Handling and storage

7.1 Precautions for safe handling

Keep away from heat, sparks and open flame. Avoid spilling, skin and eye contact. Ventilate well, avoid breathing vapours. Use approved respirator if air contamination is above accepted level.

7.2. Conditions for safe storage, including any incompatibilities

Aerosol cans: Must not be exposed to direct sunlight or temperatures above 50°C.

7.3. Specific end use(s)



8. Exposure controls/personal protection

8.1. Control parameters

Name	STD	TWA -	8 Hrs	STEL -	15 Min
2-METHOXY-1-METHYLETHYL ACETATE	WEL	50 ppm(Sk)	274 mg/ m3(Sk)	100 ppm(Sk)	548 mg/ m3(Sk)
ACETONE				500 ppm	1210 mg/m3
BUTANE	WEL	600 ppm	1450 mg/m3	750 ppm	1810 mg/m3
BUTYL ACETATE -norm	WEL	150 ppm	724 mg/m3	200 ppm	966 mg/m3
ISOBUTANE	WEL	800 ppm		800 ppm	
METHYLAL			1900 mg/m3(c)		
PROPANE		Asphyxiating	Asphyxiating	Asphyxiating	Asphyxiating

WEL = Workplace Exposure Limits

8.2. Exposure controls

Protective equipment



Engineering measures	Provide adequate general and local exhaust ventilation.
Respiratory equipment	No specific recommendation made, but respiratory protection must be used if the general level exceeds the recommended occupational exposure limit. Use chemical cartridge protection with appropriate cartridge.
Hand protection	Use protective gloves.
Eye protection	Wear approved chemical safety goggles where eye exposure is reasonably probable.
Other Protection	Wear appropriate clothing to prevent any possibility of liquid contact and repeated or prolonged vapour contact.
Hygiene measures	DO NOT SMOKE IN WORK AREA! Wash hands at the end of each work shift and before eating, smoking and using the toilet. Promptly remove any clothing that becomes contaminated. When using do not eat, drink or smoke.

9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	Aerosol
Colour	Typical
Odour	Characteristic.
Flammability Limit - Lower(%)	3.0
Flammability Limit - Upper(%)	18.6
9.2. Other information	



10. Stability and reactivity

- 10.1. Reactivity
- 10.2. Chemical stability

Stable under normal temperature conditions.

10.3. Possibility of hazardous reactions

10.4. Conditions to avoid

Avoid heat, flames and other sources of ignition. Avoid contact with: Strong oxidising agents. Strong alkalis. Strong mineral acids.

10.5. Incompatible materials

10.6. Hazardous decomposition products

Fire creates: Vapours/gases/fumes of: Carbon monoxide (CO). Carbon dioxide (CO2).

11. Toxicological information

11.1. Information on toxicological effects

Inhalation	May cause irritation to the respiratory system. Vapours may cause headache, fatigue, dizziness and nausea. Prolonged inhalation of high concentrations may damage respiratory system.
Ingestion	May cause discomfort if swallowed. May cause stomach pain or vomiting. Gastrointestinal symptoms, including upset stomach.
Skin contact	Prolonged or repeated exposure may cause severe irritation. Acts as a defatting agent on skin. May cause cracking of skin, and eczema.
Eye contact	Irritating to eyes.
Route of entry	Inhalation. Skin and/or eye contact.

12. Ecological information

Ecotoxicity

Dangerous for the environment if discharged into watercourses.

- 12.1. Toxicity
- 12.2. Persistence and degradability
- 12.3. Bioaccumulative potential
- 12.4. Mobility in soil
- 12.5. Results of PBT and vPvB assessment
- 12.6. Other adverse effects



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13. Disposal considerations

13.1. Waste treatment	Empty containers must not be burned because of explosion hazard. Dispose of
methods	waste and residues in accordance with local authority requirements.

14. Transport information

14.1. UN number		
UN No. (ADR/RID/ADN)	1950	
UN No. (IMDG)	1950	
UN No. (ICAO)	1950	
14.2. UN proper shipping name		
Proper Shipping Name	AEROSOLS	
14.3. Transport hazard class(es)		
ADR/RID/ADN Class	2	
ADR/RID/ADN Class	Class 2: Gases	
ADR Label No.	2.1	
IMDG Class	2.1	
ICAO Class/Division	2.1	
Transport Labels		



14.4. Packing group		
Packing group	Not applicable.	
14.5. Environmental hazards		
Environmentally Hazardous Substance/Marine Pollutant	No	
14.6. Special precautions for user		
EMS	2-13	
Tunnel Restriction Code		

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code



15. Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture		
Uk Regulatory References	The Chemicals (Hazard Information and Packaging for Supply) Regulations 2002. The Control of Substances Hazardous to Health Regulations 2002.	
Statutory Instruments	The Control of Substances Hazardous to Health Regulations 2002. The Chemicals (Hazard Information and Packaging for Supply) Regulations 2002.	
Approved Code Of Practice	Classification and Labelling of Substances and Preparations Dangerous for Supply.	
Guidance Notes	Workplace Exposure Limits EH40. Introduction to Local Exhaust Ventilation HS(G)37. CHIP for everyone HSG(108).	

15.2. Chemical safety assessment

16. Other information

Risk Phrases In Full	 R12 Extremely flammable. R10 Flammable. R11 Highly flammable R36 Irritating to eyes. R66 Repeated exposure may cause skin dryness or cracking. R41 Risk of serious damage to eyes. R67 Vapours may cause drowsiness and dizziness.
Hazard Statements In Full	 H319 Causes serious eye irritation. H222 Extremely flammable aerosol. H220 Extremely flammable gas. H226 Flammable liquid and vapour. H225 Highly flammable liquid and vapour. H336 May cause drowsiness or dizziness. EUH066 Repeated exposure may cause skin dryness or cracking.

DISCLAIMER

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.