



Section 1: Identification of the Material and Supplier

Product Name: Smart Active Graffiti Remover

Other Names: Potassium hydroxide solution/xylene emulsion.

Proper shipping name (ADG Code): UN 2920
Corrosive liquid, flammable, n.o.s.
(potassium hydroxide 25 %, xylene)

Recommended use: As a graffiti remover for brick and concrete.
Use strictly as directed on the product label.
Shake product well before use.

Supplier: Smart Distribution Services - Australia,
ACN: 079 072 227 ABN: 57 079 072 227
Factory 2, 69 Crissane Road, West Heidelberg, Vic 3081, Aus
Tel: +61 3 9459 8990 (business hours)
Fax: +61 2 9459 8951

Emergency Phone Numbers:
General Information: 0409 140 662 (Mobile)
Transport/Fire Emergency: 000 (Emergency services)
Medical Emergency: 131126 (Poisons Information Centre)

Section 2: Hazards Identification

Hazardous according to criteria of Worksafe Australia.

Dangerous Goods.

Risk Phrases: R: 10 Flammable.
R: 35 Causes severe burns.
R: 20/21 Harmful by inhalation and in contact with skin.

Safety Phrases: S: (1/2) Keep locked up and out of the reach of children.
S: 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S: 36/37/38 Wear suitable protective clothing, gloves and eye/face protection.
S: 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label when possible).

Section 3: Composition/Information on Ingredients

Ingredients:

Potassium hydroxide	[1310-58-3]	25 %
Xylene (mixed isomers)	[1330-20-7]	30 - 60 %
Mixed surfactants		< 10 %
Other ingredients		< 10 %
Water	[7732-18-5]	to 100 %

Section 4: First Aid Measures

For advice, contact a Poisons Information Centre (Phone 131126) or a doctor.

Swallowed: If swallowed, do NOT induce vomiting.

Skin: If skin or hair contact occurs, remove contaminated clothing and flush skin and hair with running water.

Eyes: If in eyes, hold eyelids apart and flush the eye continuously with running water. Continue flushing until advised to stop by the Poisons Information Centre or a doctor, or for at least 15 minutes.

Inhaled: Remove from exposure, rest and keep warm. Unless exposure has been slight, seek medical advice.

First Aid facilities:

Mandatory: Eye wash. Hand wash basin.

Recommended: Safety shower if handling industrial quantities.

Advice to Doctor:

Product is an emulsion of xylene in a moderately concentrated aqueous potassium hydroxide solution, containing a low proportion of mixed surfactants. May cause severe burns. Risk of serious damage to eyes. If swallowed, may cause holes in the stomach and intestines - gastric lavage may be contra-indicated. Vomiting should not have been induced because of risk of aspiration into the lungs. Contact Poisons Information Centre.

Aggravated medical conditions:

Pre-existing skin disorders, liver insufficiency.

Section 5: Fire fighting Measures

HAZCHEM Code:	2 W
Evacuate:	No.
Extinguishant:	Water fog or fine water spray.
Risk of violent reaction or explosion:	Yes.
Products of combustion:	Water vapour, carbon dioxide, oxides of sulphur.
Protective Equipment:	Full protective clothing including breathing apparatus and protective gloves.

Section 6: Accidental Release Measures

Emergency Procedures:

Contain.
Shut off all sources of ignition.
Prevent spillages from entering drains or natural waters.
Move all unnecessary personnel to a safe distance, upwind.

For large spills:

Contain spillage using sand or earth. Transfer liquid and solids to suitable closed container. Treat residues as for small spillage.

For small spills:

If local regulations permit, mop up with plenty of water and run to waste, diluting greatly with running water. Otherwise, absorb on inert absorbent, transfer to suitable closed container and arrange removal by disposals company. Wash site of spillage thoroughly with water and detergent. Ventilate area to dispel any residual vapours.

Section 7: Handling and Storage

Precautions for safe handling:

Avoid contact with skin and eyes.
Do not breathe vapours or aerosols.
Keep away from naked flames and other sources of ignition.

Conditions for safe storage:

Store in a cool, well ventilated place, out of reach of children. Large quantities should be stored in a bunded dangerous goods store. Do not allow to freeze. Store in original container. Keep container tightly closed and out of direct sunlight. Keep away from naked flames and other sources of ignition - no smoking. Keep away from acids, oxidising agents, ammonium compounds, active metals. Protect from physical damage. Clean up all spills and splashes promptly; avoid secondary accidents.

Incompatibles:

Acids, oxidising agents, active metals (such as aluminium, tin, zinc), ammonium compounds, organic halogen compounds, nitromethane and other nitro- compounds, wood and wood products.

Section 8: Exposure Controls/Personal Protection

National Exposure Standards:

ES-TWA:	Xylene	80 ppm, 350 mg/m ³
	Potassium hydroxide	2 mg/m ³
ES-STEL:	Xylene	150 ppm, 655 mg/m ³
ES-PEAK:	Potassium hydroxide	2 mg/m ³

Notations: None assigned by NOHSC, but see:
Xylene Skin [Denmark, Netherlands]

*[Skin] indicates that this material may be absorbed via unbroken skin, and any such contact may invalidate the TLV.
[Peak] indicates a ceiling concentration which should not be exceeded, even momentarily.*

Biological Limit Values: No data found.

Engineering Controls:

Do not use wood, aluminium, tin, zinc or galvanised iron as materials of construction.
Use only flame proof equipment.
Take precautionary measures against static discharges.
Ensure adequate ventilation (same as outdoors) when using.
If handling industrial quantities or if vapour/aerosol risk exists, consider local mechanical exhaust/extraction to keep airborne contamination as low as possible, and at least below the TLV.

Personal Protective Equipment:

Avoid contact with skin and eyes. Do not breathe vapour/aerosols. Personal protection to be selected from those recommended below, as appropriate to mode of use, quantity handled and degree of hazard:-

Normal Use:

Eye/face protection
Gloves, rubber or plastic.

Industrial Quantities:

Positive pressure air hood or self-contained breathing apparatus
Face shield or safety glasses
Gloves, rubber or plastic
Plastic apron, sleeves and boots
Impervious overalls.

Section 9: Physical and Chemical Properties

Appearance:	Milky-white liquid, separating into two clear liquid phases on long standing.
Odour:	Characteristic odour of xylene.
pH:	About 14, very alkaline.
Vapour Pressure:	No data.
Vapour Density:	Xylene: 3.7 (Air = 1)
Boiling Point:	From about 100 °C [water]
Melting Point:	No data.
Volatiles:	About 65 %
Volatile Organic Compounds (VOC):	33 %
Evaporation Rate:	No data.
Solubilities:	Miscible with water.
Specific Gravity/Density:	1.09 g/mL @ 20 °C
Flash Point:	Xylene phase: From about 24 °C Aqueous phase: None.
Flammable Limits:	1.7 - 7.6 % [xylene]
Dust Explosion:	Not applicable.
Auto-ignition Temperature:	464 °C [xylene]

Other Information:

Highly alkaline mixture.
Emulsion of xylene in potassium hydroxide solution. May separate

into aqueous and organic phases on long standing, or if allowed to freeze. Will react vigorously or violently with acids. Contact with aluminium, tin, zinc or galvanised iron will generate hydrogen, a flammable gas. Contact with ammonium compounds may generate ammonia, a toxic gas. Contact with organic halogen compounds, such as trichloroethylene, may cause fire or explosion. Contact with nitromethane or other nitro compounds may form shock-sensitive salts. May attack glass on prolonged contact. Will attack wood and wood products, such as paper, particle board, etc. Contact with strong oxidising agents may cause fire. Vapours may be sensitive to static discharges. Slippery when spilled.

Section 10: Stability and Reactivity

- Chemical Stability:** Stable under normal conditions, but may separate into two phases on prolonged storage.
- Conditions to Avoid:** Incompatible materials, naked flames and other sources of ignition, temperatures below freezing.
- Incompatible Materials:** Acids, oxidising agents, active metals, ammonium compounds, organic halogen compounds, nitro- compounds, wood and wood products, glass.
- Hazardous Decomposition Products:** Oxides of sulphur, oxides of carbon.
- Hazardous Reactions:** May react violently with acids. Contact with strong oxidising agents may cause fire. Contact with active metals may generate hydrogen. Contact with ammonium compounds may generate ammonia. May react with organic halogen compounds. May form shock-sensitive salts with nitro- compounds.

Section 11: Toxicological Information

Health Effects:

No data available for the mixture. Information presented relates to individual ingredients.

- Acute:**
- Swallowed:** Corrosive. Will cause burns to the lips, tongue, mouth, throat and stomach. May cause a burning sensation, abdominal pain, violent pain in throat and epigastrium, collapse. May cause holes in the stomach and intestines and/or scarring. If not immediately fatal, may cause severe tissue damage and stricture of the oesophagus. An aspiration risk.
 - Skin:** Corrosive. Causes severe burns. Even brief contact may cause degreasing of the skin and possible irritation.
 - Eyes:** Corrosive. May cause redness, pain, blurred vision. May cause immediate, severe, deep burns and permanent impaired vision.
 - Inhaled:** Xylene vapour is irritating to the nose and throat. Concentrations above 200 ppm may cause headache, dizziness, nausea, shallow breathing, a weak pulse, a ringing in the ears and difficulty breathing. Odour is not an adequate warning of over-exposure to xylene. Onset of symptoms may be delayed. Inhalation of aerosols or spray mist may cause coughing, wheezing and lung damage. Exposure to higher vapour levels may cause lung congestion, narcotic effects, slurred speech, anaesthesia, stupor and coma. Aspiration of liquid into the lungs during swallowing or vomiting may lead to severe haemorrhagic pneumonitis (bleeding in the lungs), pulmonary oedema (fluid build-up in the lungs), and may be fatal. Inhalation of aerosols or spray mist may cause coughing, wheezing and lung damage. Onset of symptoms may be delayed.

Chronic: Repeated low-level skin exposure may lead to dermatitis. Sites of scarring of the stomach and intestines (after swallowing potassium hydroxide) have been associated with the future development of stomach cancer. Repeated exposure to xylene vapours may cause dizziness, nervousness, loss of appetite, pale skin, damage to the liver, kidneys, bone marrow. Inhalation exposure to xylene in experimental animals has caused adverse reproductive effects, including birth defects.

LD50:	Potassium hydroxide	273 mg/kg oral, rat.
	Xylene	4,300 mg/kg oral, rat.
LC50:	Xylene	5,000 ppm/4 hours, rat.
LDLo:	Xylene	50 mg/kg oral, human.
LCLo:	Xylene	10,000 ppm/6 hours, man.
TCLo:	Xylene	200 ppm, human - sense of smell affected, conjunctive irritation, breathing affected.

Section 12: Ecological Information

Ecotoxicity:	Harmful to aquatic organisms and the environment.
Persistence and degradability:	One of the surfactants used in this product is considered to be not readily biodegradable.
Mobility:	Readily transported by water.
Environmental Fate:	No data.
Bioaccumulative potential:	No data.
Other adverse environmental effects:	No data.

Section 13: Disposal Considerations

The generator of any wastes from this product is responsible for its proper classification, transport and disposal.

Consult appropriate local and State regulations.

Disposal methods and containers:

Avoid disposal to natural waters or the environment.

Special precautions for landfill or incineration:

Not suitable for incineration.

Section 14: Transport Information

UN Number:	UN 2920
UN Proper shipping name:	Corrosive liquid, flammable, n.o.s. (potassium hydroxide 25 %, xylene)
Class and subsidiary risk:	8 Corrosive (alkaline) 3 Flammable liquid.
Packaging group:	II
Special precautions for user:	Do not store or transport with dangerous goods classes 1, 2.1 (when in bulk), 2.3, 4.2, 4.3, 5.1, 5.2, 7, 8 (acidic), foodstuff and foodstuff empties.
HAZCHEM Code:	2 W
Material for export:	Refer to IMO/IMDG and IATA/ICAO .

Section 15: Regulatory Information

Poisons (SUSDP): Schedule 6 Potassium hydroxide > 5 %

Dangerous Goods: UN 2920 Class 8/II Sub Risk 3 Haz. 2 W

Carcinogen: **Australia** **IARC** **NTP** **RTECS**
No. No. No. No.

Agricultural and Veterinary Chemicals Act: Not applicable.

Australian Inventory of Chemical Substances (AICS): Listed.

Other National/International Regulations: No data.

Section 16: Other Information

Date of MSDS update: October 2016
Complete re-write to new format, all sections reviewed.

Abbreviations:

NOHSC - National Occupational Health and Safety Commission.
ACGIH - American Conference of Governmental Industrial Hygienists.
MAK - Maximum workplace concentration - Germany,
(*maximale Arbeitsplatzkonzentration*)
IARC - International Agency for Research on Cancer (France).
NPT - National Toxicology Program (USA).
RTECS - Registry of Toxic Effects of Chemical Substances.
HSE - Health and Safety Executive (United Kingdom).

Literature references:

Available Sources of Data:

National Code of Practice for the Preparation of Material Safety Data Sheets 2nd Edition [2011(2003)] - NOHSC.
Australian Dangerous Goods Code.
Standard for the Uniform Scheduling of Drugs and Poisons - AHMAC.
Exposure Standards for Atmospheric Contaminants in the Occupational Environment [1003]- NOHSC.
List of Designated Hazardous Substances [10005] - NOHSC.
Merck Index - Merck Inc.
Sax's Dangerous Properties of Industrial Materials - Lewis.
Handbook of Toxic and Hazardous Chemicals and Carcinogens - Sittig.
Handbook of Reactive Chemical Hazards - Bretherick.
Hawley's Condensed Chemical Dictionary - Wiley Interscience.
AUSREG's Chemical Data Package for PCs - AUSREG Consultancy.