



SAFETY DATA SHEET

Professional Anti-Graffiti Lacquer - Base

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

1.1 Product identifier

Product name : Professional Anti-Graffiti Lacquer - Base
Product description : Paint.
Product type : Liquid.

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

| Identified uses | |
|---|--------|
| Industrial uses: Uses of substances as such or in preparations* at industrial sites Consumer uses: Private households (= general public = consumers) Professional uses: Public domain (administration, education, entertainment, services, craftsmen) | |
| Uses advised against | Reason |
| None identified. | - |

1.3 Details of the supplier of the safety data sheet

Blackfriar Paints Ltd
Portobello Industrial Estate
Birtley
County Durham
United Kingdom
DH3 2RE
Telephone no.: +44 (0) 191 4106611
Fax no.: +44 (0) 191 4920125

e-mail address of person responsible for this SDS : rpmeurohas@ro-m.com

1.4 Emergency telephone number

Telephone number : +44 (0) 207 858 1228
Hours of operation : 24 / 7

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. 3, H226
Skin Irrit. 2, H315
Eye Dam. 1, H318
STOT SE 3, H335
STOT RE 2, H373
Aquatic Chronic 3, H412
Classification according to Directive 1999/45/EC [DPD]

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

SECTION 2: Hazards identification

| | |
|----------------------------------|--|
| Classification | : R10 Xn; R20/21, R48/20 Xi; R36/37/38 R52/53 |
| Physical/chemical hazards | : Flammable. |
| Human health hazards | : Harmful by inhalation and in contact with skin. Harmful: danger of serious damage to health by prolonged exposure through inhalation. Irritating to eyes, respiratory system and skin. |
| Environmental hazards | : Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment. |

See Section 16 for the full text of the R phrases or H statements declared above.

See Section 11 for more detailed information on health effects and symptoms.

2.2 Label elements

Hazard pictograms



Signal word : Danger

Hazard statements : Flammable liquid and vapour.
Causes serious eye damage.
Causes skin irritation.
May cause respiratory irritation.
May cause damage to organs through prolonged or repeated exposure.
Harmful to aquatic life with long lasting effects.

Precautionary statements

| | |
|-------------------|---|
| General | : Keep out of reach of children. Read label before use. If medical advice is needed, have product container or label at hand. |
| Prevention | : Keep away from heat, sparks, open flames and hot surfaces. - No smoking. Wear protective gloves and eye protection: gloves : polyvinyl alcohol (PVA) - Safety glasses with side shields. Use only outdoors or in a well-ventilated area. Do not breathe vapour. |
| Response | : IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a doctor. |
| Storage | : Store in a well-ventilated place. Keep cool. Store locked up. |
| Disposal | : Dispose of contents and container in accordance with all local, regional, national and international regulations. |

Supplemental label elements : Not applicable.

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

Special packaging requirements

| | |
|--|--------------------|
| Containers to be fitted with child-resistant fastenings | : Not applicable. |
| Tactile warning of danger | : Yes, applicable. |

2.3 Other hazards

SECTION 2: Hazards identification

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

SECTION 3: Composition/information on ingredients

Substance/mixture : Mixture

| Product/ingredient name | Identifiers | % | Classification | | Type |
|--|---|----------|--|--|---------|
| | | | 67/548/EEC | Regulation (EC) No. 1272/2008 [CLP] | |
| xylene (mixture of isomeres) | REACH #: 01-2119488216-32 EC: 215-535-7 CAS: 1330-20-7 | 20 - <25 | R10 Xn; R20/21, R48/20, R65 Xi; R36/37/38 | Flam. Liq. 3, H226 Acute Tox. 4, H312 Acute Tox. 4, H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 STOT RE 2, H373 Asp. Tox. 1, H304 Flam. Liq. 3, H226 | [1] [2] |
| 2-methoxy-1-methylethyl acetate | REACH #: 01-2119475791-29 EC: 203-603-9 CAS: 108-65-6 Index: 607-195-00-7 | 10 - <15 | R10 | Flam. Liq. 3, H226 | [2] |
| hydrocarbons, aromatic, C9 | REACH #: 01-2119455851-35 EC: 918-668-5 Index: 649-356-00-4 | 5 - <10 | R10 Xn; R65 Xi; R37 R66, R67 N; R51/53 | Flam. Liq. 3, H226 STOT SE 3, H335 and H336 Asp. Tox. 1, H304 Aquatic Chronic 2, H411 | [1] |
| n-butyl acetate | REACH #: 01-2119485493-29 EC: 204-658-1 CAS: 123-86-4 Index: 607-025-00-1 | <15 | R10 R66, R67 | Flam. Liq. 3, H226 STOT SE 3, H336 | [1] [2] |
| 3-Oxazolidineethanol, 2-(1-methylethyl)-, 3,3'-carbonate | EC: 429-990-6 CAS: 145899-78-1 | 2.5 - <5 | Xi; R41 R52/53 | Eye Dam. 1, H318 Aquatic Chronic 3, H412 | [1] |
| | | | See Section 16 for the full text of the R-phrases declared above. | See Section 16 for the full text of the H statements 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, are PBTs or vPvBs or have been assigned a workplace exposure limit and hence require reporting in this section.

Type

[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 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.
- 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.
- 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. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

4.2 Most important symptoms and effects, both acute and delayed

There are no data available on the mixture itself. 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.

4.3 Indication of any immediate medical attention and special treatment needed

- 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.

See toxicological information (Section 11)

SECTION 5: Firefighting measures

5.1 Extinguishing media

- Suitable extinguishing media** : Recommended: alcohol-resistant foam, CO₂, powders, water spray.
- Unsuitable extinguishing media** : Do not use water jet.

5.2 Special hazards arising from 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.

SECTION 5: Firefighting measures

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** : Appropriate breathing apparatus may be required.
- Additional information** : No unusual hazard if involved in a fire.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

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

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.

SECTION 7: Handling and storage

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.

7.3 Specific end use(s)

Recommendations : Not available.

Industrial sector specific solutions : Not available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limits

| Product/ingredient name | Exposure limit values |
|---------------------------------|---|
| xylene (mixture of isomeres) | EH40/2005 WELs (United Kingdom (UK), 12/2011). Absorbed through skin. STEL: 441 mg/m ³ 15 minutes. STEL: 100 ppm 15 minutes. TWA: 220 mg/m ³ 8 hours. TWA: 50 ppm 8 hours. |
| 2-methoxy-1-methylethyl acetate | EH40/2005 WELs (United Kingdom (UK), 12/2011). Absorbed through skin. STEL: 548 mg/m ³ 15 minutes. STEL: 100 ppm 15 minutes. TWA: 274 mg/m ³ 8 hours. TWA: 50 ppm 8 hours. |
| n-butyl acetate | EH40/2005 WELs (United Kingdom (UK), 12/2011). STEL: 966 mg/m ³ 15 minutes. STEL: 200 ppm 15 minutes. TWA: 724 mg/m ³ 8 hours. TWA: 150 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 effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards, such as 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 of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

DNELs/DMELs

SECTION 8: Exposure controls/personal protection

| Product/ingredient name | Type | Exposure | Value | Population | Effects |
|--|------|------------------------|--------------------------|------------|----------|
| 2-methoxy-1-methylethyl acetate n-butyl acetate | DNEL | Long term Inhalation | 275 mg/m ³ | Workers | Systemic |
| | DNEL | Long term Dermal | 153.5 mg/m ³ | Workers | Systemic |
| | DNEL | Long term Dermal | 54.8 mg/m ³ | Consumers | Systemic |
| | DNEL | Long term Oral | 1.67 mg/m ³ | Consumers | Systemic |
| | DNEL | Long term Dermal | 7 mg/kg bw/day | Workers | Systemic |
| | DNEL | Long term Oral, Dermal | 3.4 mg/kg bw/day | Consumers | Systemic |
| | DNEL | Short term Inhalation | 960 mg/m ³ | Workers | Systemic |
| | DNEL | Short term Inhalation | 960 mg/m ³ | Workers | Local |
| | DNEL | Long term Inhalation | 480 mg/m ³ | Workers | Systemic |
| | DNEL | Long term Inhalation | 480 mg/m ³ | Workers | Local |
| | DNEL | Short term Inhalation | 859.7 mg/m ³ | Consumers | Systemic |
| | DNEL | Short term Inhalation | 859.7 mg/m ³ | Consumers | Local |
| | DNEL | Long term Inhalation | 102.34 mg/m ³ | Consumers | Systemic |
| | DNEL | Long term Inhalation | 102.34 mg/m ³ | Consumers | Local |

PNECs

| Product/ingredient name | Compartment Detail | Value | Method Detail |
|---------------------------------|------------------------|--------------|---------------|
| 2-methoxy-1-methylethyl acetate | Fresh water | 0.635 mg/l | - |
| | Fresh water sediment | 3.29 mg/kg | - |
| | Marine water sediment | 0.329 mg/kg | - |
| | Soil | 0.29 mg/kg | - |
| | Sewage Treatment Plant | 100 mg/l | - |
| n-butyl acetate | Fresh water | 0.18 mg/l | - |
| | Marine | 0.018 mg/l | - |
| | Fresh water sediment | 0.981 mg/kg | - |
| | Marine water sediment | 0.0981 mg/kg | - |
| | Soil | 0.0903 mg/kg | - |
| | Sewage Treatment Plant | 35.6 mg/l | - |

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.

Individual protection measures

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. (EN166)

Skin protection

Hand protection

SECTION 8: Exposure controls/personal protection

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 glove material.

Always ensure that gloves are free from defects and that they are stored and used correctly.

The performance or effectiveness of the glove may be reduced by physical/chemical damage and poor maintenance.

Barrier creams may help to protect the exposed areas of the skin but should not be applied once exposure has occurred.

Gloves : For prolonged or repeated handling, use the following type of gloves:

Recommended: > 8 hours (breakthrough time): polyvinyl alcohol (PVA)

The recommendation for the type or types of glove to use when handling this product is based on information from the following source:

EN 374-3 : 2003

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.

Body protection : Personnel should wear antistatic clothing made of natural fibres or of high-temperature-resistant synthetic fibres. (EN 1149-1)

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 : If workers are exposed to concentrations above the exposure limit, they must use appropriate, certified respirators.

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. organic vapour (Type A) and particulate filter (EN 141)

Environmental exposure controls : Do not allow to enter drains or watercourses.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance

Physical state : Liquid.

Colour : Not available.

Odour : Not available.

pH : Not available.

Melting point/freezing point : Not available.

Initial boiling point and boiling range : Not available.

Flash point : Closed cup: 23°C

Evaporation rate : Not available.

Flammability (solid, gas) : Flammable in the presence of the following materials or conditions: open flames, sparks and static discharge, heat and shocks and mechanical impacts.

Burning time : Not applicable.

Burning rate : Not applicable.

Upper/lower flammability or explosive limits : Not available.

Vapour pressure : Not available.

Vapour density : Not available.

SECTION 9: Physical and chemical properties

| | |
|--|--|
| Relative density | : 1.01 |
| Solubility(ies) | : Not available. |
| Solubility in water | : Not available. |
| Partition coefficient: n-octanol/ water | : Not available. |
| Auto-ignition temperature | : Not available. |
| Decomposition temperature | : Not available. |
| Viscosity | : Dynamic (room temperature): 400 mPa·s |
| Explosive properties | : Slightly explosive in the presence of the following materials or conditions: open flames, sparks and static discharge, heat and shocks and mechanical impacts. |
| Oxidising properties | : Not available. |

9.2 Other information

No additional information.

SECTION 10: Stability and reactivity

| | |
|--|---|
| 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. If involved in a fire, toxic gases including CO, CO ₂ and smoke can be generated. |

SECTION 11: Toxicological information

11.1 Information on toxicological effects

There are no data available on the mixture itself. 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.

Acute toxicity

SECTION 11: Toxicological information

| Product/ingredient name | Result | Species | Dose | Exposure |
|---------------------------------|------------------------------------|---------|-------------------------|----------|
| xylene (mixture of isomers) | LC50 Inhalation Gas. | Rat | 5000 ppm | 4 hours |
| | LC50 Inhalation Gas. | Rat | 6670 ppm | 4 hours |
| | LD50 Oral | Rat | 4300 mg/kg | - |
| | TDL ₀ Dermal | Rabbit | 4300 mg/kg | - |
| 2-methoxy-1-methylethyl acetate | LC50 Inhalation Vapour | Rat | 4345 mg/l | 6 hours |
| | LD50 Dermal | Rabbit | >5 g/kg | - |
| | LD50 Oral | Rat | 8532 mg/kg | - |
| hydrocarbons, aromatic, C9 | LD50 Oral | Mouse | 8400 mg/kg | - |
| | LD50 Oral | Rat | 8400 mg/kg | - |
| n-butyl acetate | LC50 Inhalation Vapour | Rat | >21 mg/l | 4 hours |
| | LC50 Inhalation Vapour | Rat | 9700 mg/m ³ | 4 hours |
| | LD50 Dermal | Rabbit | >17600 mg/kg | - |
| 1,3-dioxolane | LD50 Oral | Rat | 14000 mg/kg | - |
| | LC50 Inhalation Vapour | Mouse | 10500 mg/m ³ | 2 hours |
| | LC50 Inhalation Vapour | Rat | 20650 mg/m ³ | 4 hours |
| | LCL ₀ Inhalation Vapour | Rabbit | 32000 ppm | 4 hours |
| | LD50 Dermal | Rabbit | 15000 mg/kg | - |
| | LD50 Dermal | Rat | 15 g/kg | - |
| | LD50 Oral | Rat | 3 g/kg | - |

Conclusion/Summary : Based on available data, the classification criteria are not met.

Acute toxicity estimates

| Route | ATE value |
|----------------------|--------------|
| Dermal | 4631.6 mg/kg |
| Inhalation (vapours) | 46.32 mg/l |

Irritation/Corrosion

| Product/ingredient name | Result | Species | Score | Exposure | Observation |
|-----------------------------|---|---------|-------|--------------------------|-------------|
| xylene (mixture of isomers) | Eyes - Mild irritant | Rabbit | - | 87 milligrams | - |
| | Eyes - Severe irritant | Rabbit | - | 24 hours 5 milligrams | - |
| | Skin - Mild irritant | Rat | - | 8 hours 60 microliters | - |
| hydrocarbons, aromatic, C9 | Skin - Moderate irritant | Rabbit | - | 24 hours 500 milligrams | - |
| | Skin - Moderate irritant | Rabbit | - | 100 Percent | - |
| | Eyes - Mild irritant | Rabbit | - | 24 hours 100 microliters | - |
| n-butyl acetate | Eyes - Moderate irritant | Rabbit | - | 100 milligrams | - |
| | Skin - Moderate irritant | Rabbit | - | 24 hours 500 milligrams | - |
| | Skin - Primary dermal irritation index (PDII) | Rabbit | 0 | - | - |
| 1,3-dioxolane | Eyes - Cornea opacity | Rabbit | 1 | - | - |
| | Skin - Mild irritant | Rabbit | - | 530 milligrams | - |

Conclusion/Summary

Skin : Causes skin irritation.

Eyes : Causes serious eye damage.

Respiratory : May cause respiratory irritation. May cause damage to organs through prolonged or repeated exposure if inhaled.

Sensitisation

Conclusion/Summary

Skin : Based on available data, the classification criteria are not met.

Respiratory : Based on available data, the classification criteria are not met.

SECTION 11: Toxicological information

Mutagenicity

| Product/ingredient name | Test | Experiment | Result |
|----------------------------|----------|-------------------|----------|
| hydrocarbons, aromatic, C9 | OECD 471 | Subject: Bacteria | Negative |

Conclusion/Summary : Based on available data, the classification criteria are not met.

Carcinogenicity

Conclusion/Summary : Based on available data, the classification criteria are not met.

Reproductive toxicity

| Product/ingredient name | Maternal toxicity | Fertility | Developmental toxin | Species | Dose | Exposure |
|----------------------------|-------------------|-----------|---------------------|------------------------------|------------|----------|
| hydrocarbons, aromatic, C9 | - | - | Negative | Mammal - species unspecified | Unreported | - |

Conclusion/Summary : Based on available data, the classification criteria are not met.

Teratogenicity

Conclusion/Summary : Based on available data, the classification criteria are not met.

Specific target organ toxicity (single exposure)

| Product/ingredient name | Category | Route of exposure | Target organs |
|------------------------------|------------|-------------------|---|
| xylene (mixture of isomeres) | Category 3 | Not applicable. | Respiratory tract irritation |
| hydrocarbons, aromatic, C9 | Category 3 | Not applicable. | Respiratory tract irritation and Narcotic effects |
| n-butyl acetate | Category 3 | Not applicable. | Narcotic effects |

Specific target organ toxicity (repeated exposure)

| Product/ingredient name | Category | Route of exposure | Target organs |
|------------------------------|------------|-------------------|----------------|
| xylene (mixture of isomeres) | Category 2 | Not determined | Not determined |

Aspiration hazard

| Product/ingredient name | Result |
|------------------------------|--------------------------------|
| xylene (mixture of isomeres) | ASPIRATION HAZARD - Category 1 |
| hydrocarbons, aromatic, C9 | 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.

| Product/ingredient name | Result | Species | Exposure |
|---------------------------------|---------------------------------|--|----------|
| 2-methoxy-1-methylethyl acetate | Acute EC50 408 to 500 mg/l | Daphnia spec. | 48 hours |
| n-butyl acetate | Acute LC50 161 mg/l | Fish | 96 hours |
| | Acute LC50 100 to 180 mg/l | Fish | 96 hours |
| | Acute EC10 956 mg/l | Bacteria - Pseudomonas putida | 18 hours |
| | Acute EC50 648 mg/l | Algae - Desmodesmus subspicatus | 72 hours |
| | Acute LC50 32 mg/l Marine water | Crustaceans - Artemia salina - Nauplii | 48 hours |
| | Acute LC50 18 mg/l Fresh water | Fish - Pimephales promelas | 96 hours |

SECTION 12: Ecological information

| | | | |
|---------------|--|---|----------------------|
| 1,3-dioxolane | Acute LC50 62 mg/l Acute EC50 7787 to 6950000 µg/l Fresh water | Fish - Danio rerio Daphnia spec. - Daphnia magna | 96 hours 48 hours |
| | Acute LC50 12057 to 10000000 µg/l Marine water | Fish - Cyprinodon variegatus | 96 hours |

Conclusion/Summary : Harmful to aquatic life with long lasting effects.

12.2 Persistence and degradability

| Product/ingredient name | Test | Result | Dose | Inoculum |
|------------------------------|------|--------------------------|------|----------|
| xylene (mixture of isomeres) | - | 90 % - Readily - 5 days | - | - |
| n-butyl acetate | - | 90 % - Readily - 28 days | - | - |

Conclusion/Summary : This product has not been tested for biodegradation. Based on available data, the classification criteria are not met.

| Product/ingredient name | Aquatic half-life | Photolysis | Biodegradability |
|---------------------------------|-------------------|------------|------------------|
| xylene (mixture of isomeres) | - | - | Readily |
| 2-methoxy-1-methylethyl acetate | - | - | Readily |
| hydrocarbons, aromatic, C9 | - | - | Readily |
| n-butyl acetate | - | - | Readily |

12.3 Bioaccumulative potential

| Product/ingredient name | LogP _{ow} | BCF | Potential |
|---------------------------------|--------------------|-----|-----------|
| xylene (mixture of isomeres) | 3.16 | - | low |
| 2-methoxy-1-methylethyl acetate | 0.43 | - | low |
| hydrocarbons, aromatic, C9 | 3.7 to 4.5 | - | high |
| n-butyl acetate | 2.3 | 10 | low |
| 1,3-dioxolane | -0.37 | - | low |

12.4 Mobility in soil

Soil/water partition coefficient (K_{oc}) : Not available.

Mobility : Volatile.

12.5 Results of PBT and vPvB assessment

PBT : Not applicable.

vPvB : Not applicable.

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

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.

SECTION 13: Disposal considerations

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.

European waste catalogue (EWC)

The European Waste Catalogue classification of this product, when disposed of as waste, is:

| Waste code | Waste designation |
|------------|---|
| 08 01 11* | waste paint and varnish containing organic solvents or other dangerous substances |




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.
 Not emptied containers are hazardous waste.

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. 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 spilt material and runoff and contact with soil, waterways, drains and sewers.

SECTION 14: Transport information

| | ADR/RID | IMDG | IATA |
|--|---|---|---|
| 14.1 UN number | UN1263 | UN1263 | UN1263 |
| 14.2 UN proper shipping name | Paint. | Paint. | Paint. |
| 14.3 Transport hazard class(es) | 3  | 3  | 3  |
| 14.4 Packing group | III | III | III |
| 14.5 Environmental hazards | No. | No. | No. |
| Additional information | <p>Limited quantity: LQ7</p> <p>Remarks: (< 5L:) Limited Quantity - ADR/IMDG 3.4</p> <p>ADR Tunnel code: (D/E)</p> | <p>Emergency schedules (EmS): F-E + S-E</p> <p>Marine pollutant: NO</p> <p>Remarks: (< 5L:) Limited Quantity - ADR/IMDG 3.4.6</p> | <p>Passenger and Cargo Aircraft Quantity limitation: 60 L Packaging instructions: 355</p> <p>Cargo Aircraft Only Quantity limitation: 220 L Packaging instructions: 366</p> <p>Limited Quantities - Passenger Aircraft Quantity limitation: 10 L Packaging instructions: Y 344</p> |

SECTION 14: Transport information

14.6 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.

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

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.

CN code : 3208 90 91

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

Other EU regulations

VOC for Ready-for-Use Mixture : IIA/j. Two-pack reactive performance coatings for specific end use such as floors. EU limit value for this product : 550g/l (2007) 500g/l (2010.) This product contains a maximum of 500 g/l VOC.

Europe inventory : At least one component is not listed in EINECS but all such components are listed in ELINCS. Please contact your supplier for information on the inventory status of this material.

Priority List Chemicals (793/93/EEC) : Listed

National regulations

15.2 Chemical Safety Assessment : This product contains substances for which Chemical Safety Assessments are still required.

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

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

SECTION 16: Other information

| Classification | Justification |
|--|--|
| Flam. Liq. 3, H226 Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT SE 3, H335 STOT RE 2, H373 Aquatic Chronic 3, H412 | Expert judgment Expert judgment Expert judgment Expert judgment Expert judgment Expert judgment |

Full text of abbreviated H statements : H226 Flammable liquid and vapour.
H304 May be fatal if swallowed and enters airways.
H312 Harmful in contact with skin.
H315 Causes skin irritation.
H318 Causes serious eye damage.
H319 Causes serious eye irritation.
H332 Harmful if inhaled.
H335 May cause respiratory irritation.
H335 May cause respiratory irritation. May cause drowsiness or dizziness.
and
H336
H336 May cause drowsiness or dizziness.
H373 May cause damage to organs through prolonged or repeated exposure.
H411 Toxic to aquatic life with long lasting effects.
H412 Harmful to aquatic life with long lasting effects.

Full text of classifications [CLP/GHS] : Acute Tox. 4, H312 ACUTE TOXICITY: SKIN - Category 4
Acute Tox. 4, H332 ACUTE TOXICITY: INHALATION - Category 4
Aquatic Chronic 2, H411 AQUATIC TOXICITY (CHRONIC) - Category 2
Aquatic Chronic 3, H412 AQUATIC TOXICITY (CHRONIC) - Category 3
Asp. Tox. 1, H304 ASPIRATION HAZARD - Category 1
Eye Dam. 1, H318 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1
Eye Irrit. 2, H319 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2
Flam. Liq. 3, H226 FLAMMABLE LIQUIDS - Category 3
Skin Irrit. 2, H315 SKIN CORROSION/IRRITATION - Category 2
STOT RE 2, H373 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2
STOT SE 3, H335 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) [Respiratory tract irritation] - Category 3
STOT SE 3, H335 and H336 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) [Respiratory tract irritation and Narcotic effects] - Category 3
STOT SE 3, H336 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) [Narcotic effects] - Category 3

Full text of abbreviated R phrases : R10- Flammable.
R20/21- Harmful by inhalation and in contact with skin.
R48/20- Harmful: danger of serious damage to health by prolonged exposure through inhalation.
R65- Harmful: may cause lung damage if swallowed.
R41- Risk of serious damage to eyes.
R37- Irritating to respiratory system.
R36/37/38- Irritating to eyes, respiratory system and skin.
R66- Repeated exposure may cause skin dryness or cracking.
R67- Vapours may cause drowsiness and dizziness.
R51/53- Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R52/53- Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Full text of classifications [DSD/DPD] : Xn - Harmful
Xi - Irritant
N - Dangerous for the environment

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Date of issue/ Date of revision : 20-02-2015.

SECTION 16: Other information

Date of previous issue : No previous validation.

Version : 1

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 fulfil 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.