

Version 1 Date Revised: 4th September 2013 conforms to Regulation (EC) no 1907/2006

1. Identification of the substance/preparation and company

Product Name: **Metallic Expressions Spray Additives**

Application: Additives of polyurea floor coating system.

Manufacturer:

Flowcrete SA (Pty) Ltd, 176 Voortrekker Street, Jacobs, Durban 4052

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2 Hazards Identification

F+; Highly Flammable.

Xi; Irritating to eyes and skin.

Vapours may cause drowsiness and dizziness.

3. Composition/information on constituents

Chemical Name	EINECS No	CAS No	% by wt	Symbols and Risk Phrases
Propan-2-ol Synonyms: Isopropanol, IPA.	200-661-7	67-63-0	50 - 100	F+; Xi; R11. R36. R67.

May also contain other ingredients which are not classified as hazardous or are present at a concentration below the reporting requirements. See section 16 Additional information, for full text regarding symbols and Risk phrases.

4. First Aid measures

- General Information** : In case of accident or you feel unwell, seek medical advice and take the relevant safety data sheets. Never give anything by mouth to an unconscious person.
- Inhalation** : Move to fresh air. If breathing has stopped or is laboured give assisted respiration (e.g. mouth to mouth). If symptoms persist seek medical advice. Prevent aspiration of vomit, turn victim's head to the side.
- Skin contact** : Remove contaminated clothing and shoes. Remove product from skin and wash with soap and plenty of water. Clean with detergents, avoid use of solvents.
- Eye Contact** : Remove any contact lenses. Hold eyelids apart and immediately flush with plenty of water for at least 15 minutes. If irritation persists, seek medical advice.
- Ingestion** : Immediately seek medical advice. Do not induce vomiting (unless under medical supervision). If a person vomits when lying on his back, place him in the recovery position.

5. Fire-fighting measures

- Suitable extinguishing media** : Water spray, carbon dioxide (CO₂), foam, dry powder.
- Un-Suitable extinguishing media** : High volume water jet
- Special exposure hazards** : Burning produces noxious and toxic fumes – carbon oxides.
- Special protective equipment** : Wear self-contained breathing apparatus and protective suit.
- Additional information** : Standard procedure for chemical fires.

Water mist may be used to cool closed containers.

6. Accidental release measures

- Personal precautions** : Keep unauthorised people away. Use personal protective equipment as detailed in Section 8. Ensure adequate ventilation.
No smoking. Avoid contact with skin and eyes, do not breath vapours.
- Environmental precautions** : Prevent the product from entering drains.
Avoid subsoil penetration. Do not contaminate surface water.
- Methods for cleaning up** : Soak up with an inert absorbent material (e.g. sand) and dispose of as hazardous waste in accordance with section 13.

7. Handling and storage

- Handling** : Provide sufficient air exchange and/or exhaust in work rooms. Avoid formation of aerosol.
Ensure adequate ventilation.
Use personal protective equipment as detailed in Section 8.
Handle and open container with care. Do not eat, drink or smoke when handling.
- Storage** : Keep containers tightly closed and store in a cool, well-ventilated place. Store at 5 - 35°C.
Keep away from drink, food, food containers and animal feeding stuffs.
Do not store with strong oxidising agents.

8. Exposure controls/personal protection

UK Workplace Exposure Limits (WELs) :-

	8 hour Time Weighted Average (TWA)	Short Term Exposure Limit (STEL)
Propan-2-ol	400 ppm (999 mg/m ³)	500 ppm (1250 mg/m ³)

Malaysia Permissible Exposure Limits (PEL) :-

	Bpj	mg/m ³	
Propan-2-ol	400	983	8 hour Time Weighted Average (TWA)

Engineering measures to reduce exposure : Ensure adequate ventilation, especially in confined areas.

Personal protective equipment :

Respiratory protection : Not required under normal conditions in a well ventilated workplace (minimum 3 to 5 air changes per hour). Where the exposure limits are likely to be exceeded, wear a respirator fitted with a filter mask suitable for the solvents - or an air fed hood for prolonged activity.

Eye protection : Safety spectacles, goggles or full face shield.

Hand protection : Impervious solvent resistant rubber or plastic gloves are recommended.

The performance of gloves of a specific type can vary from supplier to supplier. Take note of the information from the glove suppliers concerning permeability and break through times and of any special workplace conditions (e.g. mechanical strain, duration of contact). Check gloves regularly for degradation/holes and replace as necessary.

Skin and body protection : Protective suit and heavy duty work shoes.

Protective measures : Handle in accordance with good industrial hygiene and safety practice.
Wash hands before breaks and immediately after handling the product.
When using do not eat, drink or smoke. Keep work clothes separate from other clothes, wash work clothes separately before re-use.

9. Physical and chemical properties

Appearance	: Liquid	pH	: neutral
Odour	: Odour of alcohol	Relative Density	: 0.786
Initial Boiling Point	: 82°C	Water solubility	: Soluble in water
Flashpoint	: 12°C		
Explosion limits (vapour/air mixes)		Lower % by volume	Upper % by volume
	: Propan-2-ol	2.0	12.7

The product is not classified as explosive, but the formation of solvent vapour/air mixes which are explosive is possible (DSEAR in the UK - Dangerous Substances Explosive Atmosphere Regulations, ATEX in the EU).
The explosion limit vapour concentrations are well above the exposure limits (given in section 8).

10. Stability and reactivity

Material is stable.

Conditions to avoid : Take precautionary measures against static electricity discharges and extremes of temperature.

Materials to avoid : Strong oxidising agents.

Hazardous decomposition products : Burning produces noxious and toxic fumes of carbon monoxide, carbon dioxide (CO₂).

11. Toxicological information

Inhalation : Vapour concentrations are attainable which could be hazardous on single exposure. May cause respiratory irritation and central nervous system depression. Symptoms may include headache, dizziness and drowsiness, progressing to incoordination and unconsciousness.

Ingestion : May be irritating to mouth and pharynx.

Eye irritation : Irritant. Vapours may cause eye irritation experienced as mild discomfort and redness.

Skin Irritation : Irritant. Vapours may cause skin irritation. May cause drying and flaking of the skin. Several of the solvents can be absorbed through the skin (see section 8).

Sensitisation : No evidence of sensitization known to us.

12. Ecological information

Bioaccumulative potential : The product is not bioaccumulating.

Additional ecological information : Avoid subsoil penetration.
Prevent product from entering drains, do not contaminate surface water.

13. Disposal considerations

Unused Product/waste from cleaning etc. : Must be disposed in compliance with local and national regulations. In the EU, use EC Waste Catalogue (EWC) code: 080111*, a hazardous waste.

Contaminated packaging : Partially filled containers shall be disposed as for the unused product above.

Well drained containers shall be disposed of as hazardous packaging waste. In the EU, use EWC Code: 150110*.

14. Transport information

Proper shipping name: Isopropanol (Isopropyl Alcohol) **UN No:** 1219

ADR/RID	Road transport		
Class	: 3	Environmental Hazard label	: No.
HI No	: 33	Packing Group	: II
Transport Category	: 2	ADR Tunnel restriction code	: (D/E)
Contains	: (Propan-2-ol).		
IMO	Sea transport		
Class	: 3	Marine Pollutant	: No.
Packing Group	: II	Environmental Hazard label	: No.
Contains	: (Propan-2-ol).		
IATA	Air transport		
Class	: 3	Packing Group	: II
Contains	: (Propan-2-ol).		

15. Regulatory information

Classification according to EEC directive:

Symbols:



Highly Flammable



Harmful

R-phrases

- R11** : Highly Flammable.
- R36/38** : Irritating to eyes and skin.
- R67** : Vapours may cause drowsiness and dizziness.

S-phrases

- S23** : Do not breathe vapour/spray.
- S28** : After contact with skin, wash immediately with plenty of water and soap.
- S36/37/39** : Wear suitable protective clothing, gloves and eye/face protection.
- S51** : Use only in well-ventilated areas.
- S60** : This material and its container must be disposed of as hazardous waste.

Special provisions statement : None

Hazardous component(s) which must be listed on the label : Propan-2-ol.

EC Directives: Dangerous Substances Directive, 67/548/EEC & adaptations.
Dangerous Preparations Directive, 88/379/EEC.
Safety Data Sheets Directive, 91/155/EEC.

UK Statutory Instruments Chemicals (Hazard Information & Packaging for Supply) Regs.
Control of Substances Hazardous to Health Regs.
Environmental Protection (Duty of Care) Regs.

UK Codes of Practice Waste Management. The Duty of Care.
Approved classification and labelling guide (Sixth edition). L131.
The compilation of safety data sheets (Third edition).

UK Guidance Notes Workplace Exposure Limits EH40.
CHIP for Everyone HSG(228).
HSG51 - The Storage of Flammable Liquids in Containers.
HSG140 - The Safe Use and Handling of Flammable Liquids.

Any existing regulations on the handling of solvents must be observed.

Airborne emissions must be controlled within local and national limits, in accordance with the appropriate legislation.

16. Other Information

This safety data sheet conforms to Regulation (EC) no 1907/2006.

UK users of our products should take appropriate measures to ensure working practices are in accordance with the Control of Substances Hazardous to Health Regulations (COSHH).

This data sheet does not constitute the users own assessment of workplace risk as required by other Health & Safety legislation.

Training Advice

Applicators need to be trained in:-

Handling and hygiene associated with use of industrial chemicals.

Correct mixing and application of the product.

Correct cleaning and disposal methods.

Restrictions on Use

The product is intended for use by appropriately trained applicators in industrial situations. It is not suitable for use in home DIY applications, especially because of its hazardous nature and the protective measures required.

Notes

Do not use organic solvents for skin cleansing, it will lead to defatting of the skin, skin irritation and/or dermatitis.

Some solvents can be absorbed through the skin.

Beware of cross contamination where different products are in use in the same location.

EC Directive relating to the classification, packaging and labelling of dangerous substances and preparations – Classification(s) and Risk (R) phrase(s) referred to in this document:

Xn : Harmful F+ : Highly flammable.

R11 : Highly Flammable.

R36 : Irritating to eyes.

R36/37 : Irritating to eyes and respiratory system.

R36/38 : Irritating to eyes and skin.

R67 : Vapours may cause drowsiness and dizziness.

This safety data sheet is based on our present knowledge and experience and is intended to serve as a guide for safe handling of the product regarding to health and environmental aspects.