



1. Identification of Substance & Company

Product	
Product name	Surface Enhancer Liquid
Other name	ENHANCE
HSNO approval	HSR002670
Approval description	Surface Coatings and Colourants (Subsidiary Hazard) Group Standard 2006
UN number	1950
Proper Shipping Name	NA
Packaging group	NA
Hazchem code	NA
Uses	Surface Enhancer is formulated specially for removal of surface pitting on polyolefin products and filling voids, tight radii, threads and other difficult to mould areas.

Company Details	
Company	PSI Brand
Address	15 Thames Street, Pandora Napier 4110, New Zealand
Telephone	+64 6 833 6043
Website	+64 6 835 0693 www.psibrand.com

Emergency Telephone Number: 0508 472 744

2. Hazard Identification

Hazard Classifications

This product has been approved under the Hazardous Substances and New Organisms Act (HSNO, Approval HSR002670, Surface Coatings and Colourants (Subsidiary Hazard) Group Standard 2006), and is classified as follows:

Classes	Hazard Statements
9.1D	Harmful to aquatic life.

SYMBOLS

None

Other Classifications

There are no other Classifications that are known to apply.

Precautionary Statements

Precautionary Avoid release to the environment.

3. Composition / Information on Ingredients

Component	CAS/ Identification	Concentration
Aliphatic emulsion	8002-53-7	100%

This is a commercial product whose exact ratio of components may vary. Trace quantities of impurities are also likely.



4. First Aid

General Information

You should call the National Poisons Centre if you feel that you may have been poisoned, burned or irritated by this product. The number is 0800 764 766 (0800 POISON) (24 hr emergency service).

If medical advice is needed, have this SDS, product container or label at hand. If exposed or concerned: Get medical advice/attention.

Recommended first aid facilities

Ready access to running water is recommended. Accessible eyewash is recommended.

Exposure

Swallowed

The product is not considered harmful. In case of persistent symptoms, contact the National Poisons Centre or a Doctor.

Eye contact

If product gets in eyes, wash material from them with running water for 15mins minutes. If symptoms persist, seek medical advice.

Skin contact

This product is non-irritating to skin. No further measures should be required.

Inhaled

Generally, inhalation of fumes is unlikely to result in adverse health effects. If coughing, dizziness or shortness of breath is experienced, remove the patient to fresh air immediately. If patient is unconscious, place in the recovery position (on the side) for transport and contact a doctor.

Advice to Doctor

Treat symptomatically

5. Firefighting Measures

Fire and explosion hazards:

This product is classed as non flammable. The liquid can burn in a fire.

Suitable extinguishing substances:

Carbon dioxide, extinguishing powder or water jet. Fight larger fires with water jet or alcohol resistant foam.

Unsuitable extinguishing substances:

Unknown.

Products of combustion:

Carbon dioxide, and if combustion is incomplete, carbon monoxide and smoke. Water. May form toxic mixtures in air and may accumulate in sumps, pits and other low-lying spaces, forming potentially explosive mixtures.

Protective equipment:

No special measures are required.

Hazchem code:

NA

6. Accidental Release Measures

Containment

If greater than 10000L is stored, secondary containment and emergency plans to manage any potential spills must be in place. In all cases design storage to prevent discharge to stormwater.

Emergency procedures

If a significant spill occurs:

Stop leak if safe/necessary; Isolate area. Collect spill – see below; Transfer to container for disposal. Dispose of according to guidelines below (Section 13).

Clean-up method

Use absorbent (soil, sand or other inert material). Rags are not recommended for the clean-up of spills, as they may create fire or environmental hazard. Collect and seal in properly labelled containers or drums for disposal. If contamination of crops, sewers or waterways has occurred advise local emergency services.

Disposal

Mop up and collect recoverable material into labelled containers for recycling or salvage. Recycle containers wherever possible. This material may be suitable for approved landfill. Dispose of only in accord with all regulations.

Precautions

No special protective clothing is normally necessary.



7. Storage & Handling

Storage	Avoid storage of harmful substances with food. Store out of reach of children. Containers should be kept closed in order to minimise contamination. Keep from extreme heat and open flames. Keep out of direct sunlight. Protect from frost.
Handling	Avoid contact with incompatible substances as listed in Section 10. Keep exposure to a minimum, and minimise the quantities kept in work areas. Do not eat, drink or smoke while using this substance. See section 8 with regard to personal protective equipment requirements.

8. Exposure Controls / Personal Protective Equipment

Workplace Exposure Standards

A workplace exposure standard (WES) has not been established by WorkSafe NZ for this product. There is a general limit of 10mg/m³ for dusts and mists when limits have not otherwise been established.

NZ Workplace Exposure Stds (2013)	Ingredient	WES-TWA	WES-STEL
	No ingredient listed		

Engineering Controls

In industrial situations, it is expected that employee exposure to hazardous substances will be controlled to a level as far below the WES as practicable by applying the hierarchy of control required by the Health and Safety in Employment Act 1992 (HSE). Exposure can be reduced by process modification, use of local exhaust ventilation, capturing substances at the source, or other methods. If you believe air borne concentrations of mists, dusts or vapours are high, you are advised to modify processes or increase ventilation.

Personal Protective Equipment

Eyes	Protective eyewear is not normally necessary when using this product. However, it is always prudent to use protective eyewear if splashes are likely.
Skin	If discomfort is felt gloves may be helpful. If you suffer from dermatitis type skin conditions, use gloves, e.g. natural rubber or nitrile. Replace frequently. Gloves should be checked for tears or holes before use.
Respiratory	Respirator is not required under normal use. Ensure adequate natural ventilation. If product is being used in confined conditions, the use of a mask or respirator may be preferred.

WES Additional Information

Not applicable

9. Physical & Chemical Properties

Appearance	white liquid, clear once solidified
Odour	no odour
pH	4.5 at 20°C (±0.5)
Vapour pressure	23hPa at 20°C
Viscosity	no data
Boiling point	100°C
Volatile materials	no data
Freezing / melting point	no data
Solubility	fully miscible with water
Specific gravity / density	1.00g/cm ³
Flash point	no data
Danger of explosion	not explosive
Auto-ignition temperature	no data
Upper & lower flammable limits	no data
Corrosiveness	non corrosive

10. Stability & Reactivity

Stability	Stable
Conditions to be avoided	Containers should be kept closed in order to avoid contamination. Keep from extreme heat and open flames.
Incompatible groups	None known
Substance Specific Incompatibility	None known
Hazardous decomposition products	None known
Hazardous reactions	None known

11. Toxicological Information

Summary

This product is not classified as harmful. The product is not known to have any harmful effects.

Supporting Data

Acute	Oral	The mixture is not harmful if swallowed.
	Dermal	No evidence of dermal toxicity.
	Inhaled	No evidence of inhalation toxicity.
	Eye	The mixture is not considered to be an eye irritant.
	Skin	The mixture is not considered to be a skin irritant.
Chronic	Sensitisation	No ingredient present at concentrations > 0.1% is considered a sensitizer.
	Mutagenicity	No ingredient present at concentrations > 0.1% is considered a mutagen.
	Carcinogenicity	No ingredient present at concentrations > 0.1% is considered a carcinogen.
	Reproductive / Developmental	No ingredient present at concentrations > 0.1% is considered a reproductive or developmental toxicant or have any effects on or via lactation.
	Systemic	No ingredient present at concentrations > 1% is considered a target organ toxicant.
	Aggravation of existing conditions	None known.

12. Ecological Data

Summary

The liquid may be slightly hazardous in the aquatic environment.

Supporting Data

Aquatic	In Germany this mixture has been assessed as Water hazard class 1.
Bioaccumulation	Not bioaccumulative
Degradability	This mixture is biodegradable.
Soil	No evidence of soil toxicity.
Terrestrial vertebrate	This mixture is not harmful to terrestrial vertebrates.
Terrestrial invertebrate	No evidence of toxicity towards terrestrial invertebrates.
Biocidal	no data

13. Disposal Considerations

Restrictions	There are no product-specific restrictions, however, local council and resource consent conditions may apply, including requirements of trade waste consents.
Disposal method	Disposal of this product must comply with the requirements of the Resource Management Act for which approval should be sought from the Regional Authority. The substance must be treated and therefore rendered non-hazardous before discharge to the environment.
Contaminated packaging	Rinse containers with water before disposal. Preferably re-cycle container, otherwise send to landfill or similar.



14. Transport Information

There are no specific restrictions for this product (not a dangerous good).

UN number:	NA	Proper shipping name:	NA
Class(es)	NA	Packing group:	NA
Precautions:	NA	Hazchem code:	NA

15. Regulatory Information

This product is an approved substance under the Hazardous Substances and New Organisms Act (HSNO). Approval code: HSR002670, Surface Coatings and Colourants (Subsidiary Hazard) Group Standard 2006.

Specific Workplace Controls (as per HSNO approval referenced to Controls Matrix)

Key workplace requirements are:

SDS	To be available within 10 minutes in workplaces storing > 50L.
Labelling	No removal of labels and/or decanting of product into other containers can occur.
Emergency plan	Required if > 10000L is stored.
Approved handler	Not required.
Tracking	Not required.
Bunding & secondary containment	Required if > 10000L is stored.
Signage	Required if > 10000L is stored.
Location test certificate	Not required.
Flammable zone	Not required.
Fire extinguisher	Not required.

NOTE: The above workplace requirements apply if only this particular substance is present. The complete set of controls for a location will depend on the classification and total quantities of other substances present in that location.

Other Legislation

In New Zealand, the use of this product may come under the Resource Management Act and Regulations, the Health, Safety in Employment Act and Regulations, local Council Rules and Regional Council Plans.

16. Other Information

Abbreviations

Approval Code	Approval HSR002670, Surface Coatings and Colourants (Subsidiary Hazard) Group Standard 2006 Controls, EPA. www.epa.govt.nz
CAS Number	Unique Chemical Abstracts Service Registry Number
Ceiling	Ceiling Exposure Value: The maximum airborne concentration of a biological or chemical agent to which a worker may be exposed at any time.
Controls Matrix	List of default controls linking regulation numbers to Matrix code (e.g. T1, I16).
EC₅₀	Ecotoxic Concentration 50% – concentration in water which is fatal to 50% of a test population (e.g. daphnia, fish species)
EPA	Environmental Protection Agency (previously known as ERMA)
ERMA	Environmental Risk Management Authority
HAZCHEM Code	Emergency action code of numbers and letters that provide information to emergency services, especially fire fighters
HSNO	Hazardous Substances and New Organisms (Act and Regulations)
IARC	International Agency for Research on Cancer
LEL	Lower Explosive Limit
LD₅₀	Lethal Dose 50% – dose which is fatal to 50% of a test population (usually rats).
LC₅₀	Lethal Concentration 50% – concentration in air which is fatal to 50% of a test population (usually rats)
MSDS (SDS)	Material Safety Data Sheet (or Safety Data Sheet)
STEL	Short Term Exposure Limit - The maximum airborne concentration of a chemical or biological agent to which a worker may be exposed in any 15 minute period, provided the TWA is not exceeded
TWA	Time Weighted Average – generally referred to WES averaged over typical work day (usually 8 hours)
UEL	Upper Explosive Limit
UN Number	United Nations Number
WES	Workplace Exposure Standard - The airborne concentration of a biological or chemical agent to which a worker may be exposed in a work day.

References

Data	Unless otherwise stated comes from the EPA HSNO chemical classification information database (CCID) http://www.epa.govt.nz/hs/compliance/chemicals.html , for specific chemicals.
ERMA Transfer Gazettes	Classifications and controls assigned for specific ingredients (consolidated gazette, 2004)
Controls Matrix	Part of the EPA New Zealand User Guide to the HSNO Control Regulations
WES 2013	The NZ Workplace Exposure Standards Effective from 2013, published by WorkSafe NZ and available on their web site – www.worksafe.govt.nz .
Other References:	Suppliers SDS

Review

Date	Reason for review
March 2013	New MSDS – draft version
January 2016	Update of ingredients section. OSH to Worksafe

Disclaimer

This SDS was prepared by Datachem LTD and is based on our current state of knowledge, including information obtained from suppliers. The SDS is given in good faith and constitutes a guideline (not a guarantee of safety). The level of risk each substance poses is relevant to its properties (as summarised in the SDS) AND HOW THE SUBSTANCE IS USED. While guidelines are given for personal protective equipment, such precautions must be relevant to the use. The likely HSNO classifications, are based on our experience, ERMA Guidelines and international classifications. To contact the SDS author, email info@datachem.co.nz or phone: **(09) 940 30 80**.

