



HEALTH AND SAFETY DATA SHEET

1. **PRODUCT:** JOHNSTONE'S PERFORMANCE 2 Pack Adhesion Promoting Primer – Activator **PAGE: 1 of 4**
REVISION: 4 **DATE: 1.11.07**
USE: The activator of a two pack water-borne primer.
Apply when mixed by brush or roller.

2. **HAZARDS IDENTIFICATION**
IRRITANT. Also refer to section 11.

3. **COMPOSITION/INFORMATION ON INGREDIENTS**
Substances presenting a health or environmental hazard within the meaning of the CHIP Regulations or which are assigned Workplace Exposure Limits: -

Name	EC No	CAS No	Conc.Range	Symbol*	R-Phrases*
Tetra Ethylene Pentamine	203-968-2	112-57-2	5-10%	C	R21,22,34,43,52,53

* for full text see section 16.

4. **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.
Inhalation: Remove to fresh air, keep patient warm and at rest. If breathing has stopped, administer artificial respiration. Give nothing by mouth. If unconscious, place in the recovery position and seek medical advice.
Skin Contact: Remove contaminated clothing. Wash skin thoroughly with water.
Eye Contact: Remove contact lenses. Irrigate copiously with clean, fresh water, holding the eyelids apart and seek medical advice.
Ingestion: If accidentally swallowed obtain immediate medical attention. Keep at rest. DO NOT induce vomiting.

5. **FIRE FIGHTING MEASURES**
The liquid product is 'non-flammable'.
Extinguishing Media:
Recommended: alcohol resistant foam, CO₂, powder, water spray/mist
Not to be used: water jet
Recommendations: Fire will produce dense black smoke containing hazardous products of combustion (see section 10). Exposure to decomposition products may be a hazard to health. Appropriate self contained breathing apparatus may be required. Cool closed containers exposed to fire with water spray. Do not allow run off from fire fighting to enter drains or watercourses.

6. **ACCIDENTAL RELEASE MEASURES**
Avoid breathing vapours. Refer to protective measures listed in sections 7 and 8. Contain and collect spillages with non-combustible absorbent materials e.g. sand, earth, vermiculite, diatomaceous earth and place in a suitable container for disposal in accordance with the waste regulations (see section 13). Do not allow to enter drains or water courses. Clean preferably with a detergent; avoid use of solvents. If the product enters drains or sewers, immediately contact the local water company; in case of contamination of streams, rivers or lakes, the relevant environment agency.

7. **HANDLING AND STORAGE**
HANDLING: Avoid contact with skin and eyes. Smoking, eating and drinking should be prohibited in storage and use areas. For Occupational Exposure Controls measures see Section 8. Keep the container tightly closed. Never use pressure to empty, the container is not a pressure vessel. Ensure good housekeeping and regular safe removal of waste materials. Persons with a history of sensitisation problems should only be employed in processes in which these products are used under medical supervision.

The **Manual Handling Operations Regulations** may apply to the handling of containers/packages of this product. To assist employers the following method of calculating the weight of any pack size is given. Take the pack size volume in litres and multiply this figure by the specific gravity value given in section 9. This will give the net weight of the product in kilograms. Allowance will then have to be made for the immediate packaging to give an approximate gross weight.

STORAGE: Observe label precautions. Store between 5°C and 25°C in a dry, well ventilated place away from sources of heat, ignition and direct sunlight. No smoking. Prevent unauthorised access. Keep out of the reach of children. Store separately from oxidising agents and strongly alkaline and strongly acidic materials. Containers which are opened should be properly resealed and kept upright to prevent leakage.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

EXPOSURE 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/or solvent vapours below the relevant Exposure Limit Values, suitable respiratory protection must be worn (see 'Occupational Exposure Controls' below).

EXPOSURE LIMIT VALUES:

Substance	Exposure Limit Values				Notations
	8 hr LTEL (1)		15 min STEL (2)		
	ppm	mgm ⁻³	ppm	mgm ⁻³	
-	-	-	-	-	-

(1) Long-Term Exposure Limit - 8 hour Time Weighted Average

(2) Short-Term Exposure Limit - 15 minute reference period

(W) Workplace Exposure Limit (WEL)

(SUP) Recommended by suppliers

(A) Allocated limits by analogy with similar materials

WEL's are taken from the current version of EH40, except those marked (SUP) which are assigned by the supplier of the substance

OCCUPATIONAL EXPOSURE CONTROLS: All Personal Protective Equipment, including Respiratory Protective Equipment, used to control exposure to hazardous substances must be selected to meet the requirements of the COSHH regulations.

RESPIRATORY PROTECTION: If exposure to hazardous substances identified above cannot be controlled by the provision of local exhaust ventilation and good general extraction, suitable respiratory protective equipment should be worn. Dry sanding of the dry film will give rise to dust and/or hazardous fumes. Wet sanding should be used wherever possible.

HAND PROTECTION: When skin exposure may occur, advice should be sought from glove suppliers on appropriate types and usage times for this product. The instructions and information provided by the glove supplier on use, storage, maintenance and replacement must be followed. Barrier creams may help to protect exposed areas of skin but are not substitutes for full physical protection. They should not be applied once exposure has occurred.

EYE PROTECTION: Eye protection designed to protect against liquid splashes should be worn.

SKIN PROTECTION: Cotton or cotton/synthetic overalls are normally suitable. Grossly contaminated clothing should be removed and the skin washed with plenty of water. Regular skin inspection of users of this product is recommended. ALWAYS WASH YOUR HANDS BEFORE EATING, SMOKING OR USING THE TOILET.

9. PHYSICAL AND CHEMICAL PROPERTIES

physical state	viscous liquid
flash point	>100°C
specific gravity	1.01 - 1.04 @ 20°C
solubility in water	miscible
pH	7-9
boiling point	100°C
VOC Directive 2004/42/CE	Class A.j. Max VOC 80g/l

10. STABILITY AND REACTIVITY

Stable under the recommended storage and handling conditions (see section 7). In a fire, hazardous decomposition products such as smoke, carbon dioxide, carbon monoxide and oxides of nitrogen may be produced. Keep away from oxidising agents and strongly alkaline and strongly acidic materials to prevent the possibility of an exothermic reaction.

11. TOXICOLOGICAL INFORMATION

There is no data available on the product itself. The product has been assessed following the conventional method in CHIP and is classified for toxicological hazards accordingly. This takes into account, where known, delayed and immediate effects and chronic effects of components from short-term and long-term exposure by oral, inhalation and dermal routes of exposure and eye contact. See sections 2 and 15 for details of the resulting hazard classification. Based on the properties of Tetra Ethylene Pentamine and considering toxicology on similar preparations, this product may be a skin sensitiser and which are irritating to eyes, mucous membrane and skin. Repeated skin contact may lead to irritation and to sensitisation, possibly with cross sensitisation to other epoxies. Skin contact with the product and exposure to mist and vapour should be avoided. Contact with the eye will cause irritation and may burn eye tissue. Ingestion may cause burns to lips and mouth and may lead to severe respiratory difficulties, stimulation of the central nervous system and in extreme cases unconsciousness.

12. ECOLOGICAL INFORMATION

There is no data available on the product itself. The product should not be allowed to enter drains or water courses or be deposited where it can affect ground or surface waters. The product has been assessed following the conventional method in CHIP and is not classified as dangerous for the environment, but contains substances so classified. See section 3 for details.

Substance classified As DfE(1)	Mobility(2)	Persistence and Biodegradability(2)	Other adverse Effects
Tetra Ethylene Pentamine	Miscible with water	Slowly biodegradable	LC50 1-10 mg/l

(1) All substances listed in Section 3 and classified as dangerous for the environment (DfE).

(2) Information taken from suppliers' safety data sheet and relevant to impacts in the accidental release in storage, handling, use and disposal.

13. DISPOSAL CONSIDERATIONS

Do not allow into drains or water courses or dispose of where ground or surface waters may be affected.

The classification of this product, when disposed of as waste is 08 01 11. If this product is mixed with other wastes, this code may no longer apply. If mixed with other wastes, the appropriate code should be assigned. For further information contact your local waste authority.

Wastes, including emptied containers, are controlled wastes and should be disposed of in accordance with regulations made under The Control of Pollution Act and The Environmental Protection Act. Using information provided in this safety data sheet, advice should be obtained from the relevant waste authority on the classification of empty containers.

14. TRANSPORT INFORMATION

Transport within the users 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.

Onwards transport subsequent to purchase: - Transport to be in accordance with ADR for road, RID for rail, IMDG for sea and ICAO/IATA for air.

Proper shipping name: The product is not classified as dangerous for carriage
 UN number:
 Hazard class:
 Packing Group:

15. REGULATORY INFORMATION

The product is classified and labelled in accordance with the CHIP Regulations as follows-

Classification: IRRITANT

Symbol: Xi

Names: Contains Tetra Ethylene Pentamine

R Phrases:

R36/38 Irritating to eyes and skin

R43 May cause sensitisation by skin contact

S Phrases

S2 Keep out of the reach of children

S24/25 Avoid contact with skin and eyes

S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice

S28 After contact with skin, wash immediately with plenty of soap and water or a recognised skin cleaner – DO NOT USE SOLVENT OR THINNERS

S36/37/39 Wear suitable protective clothing, gloves and eye/face protection

S46 If swallowed seek medical advice immediately and show this container or label

S51 Use only in well ventilated areas

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 Health and Safety at Work etc. Act and the Control of Substances Hazardous to Health Regulations apply to the use of this product at work.

16. OTHER INFORMATION

Symbols and text of the R phrases in section 3: -

RISK PHRASES

R21/22 Harmful in contact with skin and if swallowed

R34 Causes burns

R43 May cause sensitisation by skin contact

R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment

WARNING SYMBOLS

C Corrosive

The information contained in the Health and Safety Data Sheet is provided in accordance with the requirements of the CHIP Regulations. The product should not be used for purposes other than those shown in section 1 without first referring to the supplier and obtaining written handling instructions. As the specific conditions of use of the product are outside the suppliers control, the user is responsible for ensuring that the requirements of relevant legislation are complied with. This information contained in the safety data sheet is based on present knowledge and current national legislation. It provides guidance on health, safety and environmental aspects of the product and should not be construed as any guarantee of technical performance or suitability for particular applications.

Further information and advice can be found in: -

The Control of Substances Hazardous to Health Regulations 2002 (SI2002:2677) and amendments
COSHH Essentials: easy steps to control chemicals (HSG193). Details of Control Guidance Sheets, which may be relevant to the particular conditions of use, can also be found in this publication.
Dangerous Substances and Explosive Atmospheres Regulations 2002 (SI 1992:2793)
ACoP - Dangerous Substances and Explosive Atmospheres Regulations 2002 (L138)
The Manual Handling Regulations 1992 (SI 1992:2793)
Chemical Warehousing: The Storage of Packaged Dangerous Substances (HSG51)
The Environmental Protection (Duty of Care) Regulations 1992 (SI 1992:2839)
A Guide to Working with Solvents (INDG 272)
HSE website www.hse.gov.uk