

SAFETY DATA SHEET

ARDROX 9PR5 (+ HFR / OVERCHEK REMOVER) (AEROSOL)

1 IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY

PRODUCT NAME: ARDROX 9PR5 (+ HFR / OVERCHEK REMOVER) (AEROSOL)

PART No.: A9PR5---

APPLICATIONS: Solvent cleaner.

Label description - Non chlorinated solvent based penetrant remover.

SUPPLIER: Chemetall PLC
Denbigh Road,
Bletchley,
Milton Keynes, MK1 1PB.

TEL: 01908 649333

FAX: 01908 373939

EMERGENCY TELEPHONE(S): 01908 649333.

2 COMPOSITION/INFORMATION ON INGREDIENTS

INGREDIENT NAME	CAS No.	CONTENTS	HEALTH (class)	RISK (R No.)
NAPHTHA (PETROLEUM), HYDRODESULPHURIZED LIGHT, DEAROMATIZED (262002)	64741-84-0	60-100 %	Xn, N	65, 51/53
BUTANE (IN PROPELLANT)	106-97-8	0		
PROPANE (IN PROPELLANT)	74-98-6	0		

COMPOSITION COMMENTS: The product composition (in %w/w) declared above does not include the propellant. The product is solvent-based. The aliphatic hydrocarbon solvent contains <0.1% aromatics.

The product will contain <0.1% w/w of benzene.

The propellant consists of a mixture of propane and butane (10-30%).

In the ingredient list above, exposure limit values exist for one or more ingredients. See Section 8 for details.

3 HAZARDS IDENTIFICATION

Highly flammable.

Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

ARDROX 9PR5 (+ HFR / OVERCHEK REMOVER) (AEROSOL)

4 FIRST AID MEASURES

- INHALATION:** Move the exposed person to fresh air at once. Wear protective clothing and breathing apparatus if necessary. When unconscious, loosen tight clothing and position in secured sideposition. Perform artificial respiration if breathing has stopped. Provide rest, warmth and fresh air. Get medical attention.
- INGESTION:** Not usually applicable to the product as supplied. Ingestion of significant quantities of the product is unlikely to occur when using products supplied in aerosol or pump spray containers. If any ill effects occur while using the product, note the following. Immediately rinse mouth and provide fresh air. Give the casualty small sips of water (up to a total of 100 ml) if he wants a drink but stop if he feels sick. Do not make the casualty drink a lot of liquid at once as he may vomit which may be dangerous. Do not give victim anything to drink if he is unconscious. When unconscious, loosen tight clothing and position in secured sideposition. Do not induce vomiting. If vomiting occurs, the head should be kept low so that stomach vomit doesn't enter the lungs. Provide fresh air, warmth and rest, preferably in comfortable upright sitting position. Get medical attention immediately!
- SKIN:** Immediately remove contaminated clothing. Wash skin thoroughly with soap and water. Continue to rinse for at least 10 minutes. Get medical attention if irritation or dryness persists after washing.
- EYES:** Promptly wash eyes with plenty of water while lifting the eye lids. Make sure to remove any contact lenses from the eyes before rinsing. Continue to rinse for at least 10 minutes. Get medical attention if any discomfort continues.

5 FIRE FIGHTING MEASURES

- EXTINGUISHING MEDIA:** The aerosol package contains an extremely flammable propellant. Extinguish fires using the following.
TO BE USED: Water spray, fog or mist. Foam. Powder. Carbon dioxide (CO₂).
NOT TO BE USED: Water jets.
- SPECIAL FIRE FIGHTING PROCEDURES:** Water jets must not be used on burning product. Containers close to fire should be removed immediately or cooled with water. In a fire, beware of exploding aerosol cans.
- UNUSUAL FIRE & EXPLOSION HAZARDS:** This product contains flammable/combustible ingredients which may burn if involved in a fire. The vapour is heavier than air and may spread over a wide area leading to the risk of remote ignition and flashback. The propellant vapour is heavier than air and may spread over a wide area leading to the risk of remote ignition and flashback. The aerosol package comprises the product and an extremely flammable propellant in a pressurised container. In a fire, beware of exploding aerosol cans.
- HAZARDOUS DECOMPOSITION PRODUCTS:** On heating to total decomposition, the following materials may be produced. Oxides of carbon.

ARDROX 9PR5 (+ HFR / OVERCHEK REMOVER) (AEROSOL)

PROTECTIVE MEASURES IN FIRE:

On heating to total decomposition, smoke and toxic gases from incomplete combustion may be produced, hence breathing apparatus should be worn in cases of fire.

6 ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS DURING SPILL:

Evacuate the area and keep unauthorised people away from the spillage. Extinguish all sources of ignition. Avoid sparks, flames, heat and smoking. Ventilate area well or wear breathing apparatus. Wear any necessary protective clothing/equipment. See Section 8 for further details.

PRECAUTIONS TO PROTECT ENVIRONMENT:

Contain the spillage to prevent entry into drains or waterways. Notify the local authority if spillage of a large quantity into drains or waterways occurs.

SPILL CLEANUP METHODS:

Spillages from aerosol containers are very unlikely. In the case of aerosols being ruptured, care should be taken due to the rapid escape of the pressurised contents and propellant. If a large number of containers are ruptured, treat as a bulk material spillage as follows. Spillages should be absorbed with sand, earth or mineral granules etc. The contaminated absorbent should then be transferred to polythene containers, using non-sparking shovels eg. rubber or plastic and disposed of via a licensed waste disposal contractor. Wash residues away with strong detergent/water solution or allow to evaporate if the quantity remaining is small.

7 HANDLING AND STORAGE

USAGE PRECAUTIONS:

Avoid contact with the skin, eyes and clothing. Avoid inhalation of spray or vapour. Use only under conditions of adequate ventilation, or use respiratory protection. Avoid contact of the product with strong oxidizing agents. Keep away from naked flames, sparks or any other sources of ignition. Static electricity and formation of sparks must be prevented. Always wear the appropriate personal protective equipment when using or handling this product. Protect aerosol containers from sunlight and temperatures in excess of 50°C, even when apparently empty. Do not pierce or burn aerosol containers. Do not use solvents for washing the skin. Do not smoke, eat or drink while handling or using this product. Do not ingest the product. Wash hands after use.

STORAGE PRECAUTIONS:

Store in accordance with the Highly Flammable Liquids and LPG Regulations. Store in a cool, well ventilated area. Keep away from oxidizing agents. Keep away from heat, sparks and open flame. Keep separate from food, feedstuffs, fertilizers and other sensitive material. Store and transport the product in its original container kept in an upright position. Containers of this product should be stored in a suitably designed or bunded area to minimise the risk of environmental pollution. Store between -10°C and 30°C.

ARDROX 9PR5 (+ HFR / OVERCHEK REMOVER) (AEROSOL)

8 EXPOSURE CONTROLS AND PERSONAL PROTECTION

INGREDIENT NAME	CAS No	STD	LT EXP (8 hrs)	ST EXP (15 min)
NAPHTHA (PETROLEUM), HYDRODESULPHURIZED LIGHT, DEAROMATIZED (262002)	64741-84-0	MEL.	250 ppm	
BUTANE (IN PROPELLANT)	106-97-8	OES.	600 ppm	750 ppm
PROPANE (IN PROPELLANT)	74-98-6		No std.	No std.

INGREDIENT COMMENTS: SRL = Supplier's Recommended Limit.
OES = Occupational Exposure Standard (from EH40).
MEL = Maximum Exposure Limit.

PROTECTIVE EQUIPMENT:



VENTILATION:

General and/or local exhaust ventilation should be provided to keep operator exposure to the concentrated chemical and working solution below any recommended limits specified for the product ingredients. Ventilation also needs to be adequate to maintain the vapour concentration of the flammable/combustible ingredient(s) well below the lower explosive limit (LEL). In some cases, a flameproof exhaust ventilation motor may be needed.

RESPIRATORS:

Wear suitable respiratory protection if exposed to high levels of spray or vapour. In most cases, a respirator with a filter cartridge recommended for use with hydrocarbon solvents would be satisfactory. Wear breathing apparatus if entering tanks, pits or enclosed spaces.

PROTECTIVE GLOVES:

Wear impermeable gloves complying with an approved standard (eg. BS 1651 or EN374). Suitable gloves would be those manufactured from PVC, nitrile rubber or neoprene.

EYE PROTECTION:

Wear eye/face protection complying with an approved standard (eg. BS 2092 Chemical Grade or EN166-3). In most conditions, this would consist of goggles or face visor.

OTHER PROTECTION:

Wear chemical splash-resistant overalls and chemical and impact-resistant footwear. Wear anti-static footwear to an approved standard (eg. BS 5958). Eyewash stations should be readily accessible near where this product is handled and used.

Monitoring may be required to determine the effectiveness of the ventilation controls and/or the necessity to use respiratory protective equipment.

9 PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Mobile, single phase liquid.
COLOUR: Clear. Colourless.
ODOUR/TASTE: Mild (or faint). Petroleum.
PHYSICAL DATA COMMENTS:

The information given in this section relates to the actual product inside the aerosol container. It does not include the propellant. As this product contains only an organic solvent/oil system, with no or negligible water content, a

ARDROX 9PR5 (+ HFR / OVERCHEK REMOVER) (AEROSOL)

	meaningful pH value cannot be determined.	
SOLUBILITY DESCRIPTION:	Immiscible with water. Miscible with hydrocarbons and halogenated hydrocarbons.	
BOILING POINT (°C):	94-99	MELTING POINT (°C): <-30
SPECIFIC GRAVITY (Water=1):	0.71	VAPOUR DENSITY (air=1): >1
VAPOUR PRESSURE:	9.9kPa @ 20 °C	EVAPORATION RATE: 5.5(BuAc=1)
VOLATILE BY VOL.(%):	100	
VISCOSITY:	0.59 cSt @ 20 °C	FLASH POINT (°C): -4
FLASH POINT METHOD:	CC (Closed cup).	
AUTO IGNITION TEMPERATURE (°C):	>200	
FLAMMABILITY LIMIT (lower %):	0.8	
FLAMMABILITY LIMIT (upper %):	9.0	

10 STABILITY AND REACTIVITY

STABILITY:	Under normal conditions of storage and use, this product will be stable.
CONDITIONS TO AVOID:	Avoid conditions involving non-intentional contact with the materials specified in the section 'Materials to Avoid'. Avoid heat, flames and other sources of ignition.
HAZARDOUS POLYMERIZATION:	Under normal conditions of storage and use, hazardous polymerisation of this product will not occur.
MATERIALS TO AVOID:	This product may react with the following material(s) - strong oxidizing agents. The reaction may be vigorous or violent.
HAZARDOUS DECOMPOSITION PRODUCTS:	On heating to total decomposition, the following materials may be produced. Oxides of carbon.

11 TOXICOLOGICAL INFORMATION

TOXIC DOSE1- LD50:	>5000mg/kg (oral, rat) (from supplier's data)
TOXICOLOGICAL INFORMATION:	No specific toxicological tests have been carried out on this product by Chemetall.
HEALTH HAZARDS, GENERAL:	Irritating to eyes and skin. This product has a strong defatting action on the skin. Prolonged or frequent skin contact may lead to irritation, dryness and cracking and the risk of developing dermatitis. High vapour concentrations may irritate the respiratory system. Vapours may cause drowsiness and dizziness. Ingestion can lead to vomiting and aspiration into the lungs.
INHALATION:	Inhalation of high concentrations of vapour may cause the following symptoms. Irritation of the nasal tract and respiratory system. Drowsiness. Dizziness. Headache. Central nervous system depression. Anaesthetic in high concentrations.

ARDROX 9PR5 (+ HFR / OVERCHEK REMOVER) (AEROSOL)

INGESTION:	Not usually applicable under normal conditions of handling and use of products in aerosol/pump spray containers. Expected to have a low level of toxicity. May cause the following symptoms. Nausea. Vomiting. Aspiration into the respiratory system during ingestion or from vomiting may cause bronchopneumonia or pulmonary oedema.
SKIN:	Irritating to skin. Product has a defatting effect on skin. Prolonged or frequent contact may lead to dryness and cracking. Continued exposure may lead to the risk of developing dermatitis.
EYES:	Irritation, watering, redness. Serious or permanent damage is unlikely.
HEALTH WARNINGS:	ACUTE HEALTH EFFECTS: A single exposure may lead to irritation of the following - the eyes, skin, nasal tract and respiratory system. Vapours may cause drowsiness and dizziness. Aspiration into the respiratory system may cause bronchopneumonia or pulmonary oedema. CHRONIC HEALTH EFFECTS: Exposure to sublethal quantities over a prolonged period of time may lead to the following symptoms - skin dryness and cracking and the risk of developing dermatitis.

12 ECOLOGICAL INFORMATION

ENVIRONMENTAL HAZARDS:

Do not allow the product as supplied to enter local authority drains, waterways or sewers, or soil. This product is expected to be removed in a waste water treatment facility. Avoid release to the environment. The product contains an ingredient or ingredients classified as 'Dangerous for the Environment' (N). The product contains an ingredient or ingredients classified as 'Toxic to aquatic organisms' and 'May cause long-term adverse effects in the aquatic environment' (R51/53).

As this product is completely immiscible with water, it is not possible to determine typical oxygen demand figures for its solutions.

DEGRADABILITY:

No specific biodegradability tests have been carried out on this product. This product contains the following ingredients/ingredient types that are classified as biodegradable/readily biodegradable.

Hydrocarbon solvent(s).

The product is highly volatile and will rapidly evaporate to the air.

ACUTE FISH TOXICITY:

No specific aquatic toxicity tests have been carried out on this product. Based on the information available for the ingredients, this product is expected to be as follows - toxic to aquatic organisms (LC50/EC50/IC50=1-10 mg/l).

13 DISPOSAL CONSIDERATIONS

DISPOSAL METHODS:

Aerosol/pump spray cans (used or unused) should be disposed of, without puncturing, via a licensed waste disposal contractor. This product can be incinerated.

Bulk quantities of unused product and emptied containers should be recycled or disposed of via a licensed waste disposal contractor.

This material and its container must be disposed of as hazardous waste.

ARDROX 9PR5 (+ HFR / OVERCHEK REMOVER) (AEROSOL)

Goods by Road (ADR).
Carriage of Dangerous Goods by Road and Rail (Classification, Packaging and Labelling) Regulations.

16 OTHER INFORMATION

USER NOTES:

This Safety Data Sheet has been compiled for the product as supplied. In use, it may be dissolved in/diluted with water or other solvent, mixed with other chemicals/products or used as supplied. The hazards of the working solution will be dependent on its concentration and temperature and will need to be combined with those of any other chemicals/products involved, if applicable. See the appropriate Technical Data Sheet for further information.

It should be noted that this Safety Data Sheet only outlines the hazards of the product specified and does not constitute a users workplace risk assessment as required by other health and safety legislation.

For further safety-related information, please contact:

Chemetall PLC
Denbigh Road,
Bletchley,
Milton Keynes,
MK1 1PB.

Telephone : 01908 649333
Facsimile : 01908 373939
email: ukinfo@chemetall.com

RECOMMENDED USES AND RESTRICTIONS:

This product is intended to be used industrially/commercially for the application described in Section 1. It should not be used for domestic purposes or for any other industrial/commercial use without the prior approval of Chemetall.

AEROSOL PRODUCTS - ADDITIONAL NOTES:

The information in Section 15 refers to the Supply Classification, according to the C.H.I.P. Regulations, of the actual product inside the aerosol container, without any additional hazards from the propellant. As the aerosol container contains an extremely flammable propellant, the hazard information on the can will be modified as follows.

Additional Hazard Symbols:

Flame symbol (Extremely Flammable). This replaces the Highly Flammable symbol.

Additional Risk Phrases:

Extremely Flammable (R-12). This replaces Highly Flammable (R-11).

INFORMATION SOURCES:

Health & Safety Executive Guidance Note EH40 - Occupational Exposure Limits.
Raw material suppliers Safety Data Sheets.

REVISION COMMENTS:

The following sections contain revised or additional information.
2. 8. 9. 15.

ARDROX 9PR5 (+ HFR / OVERCHEK REMOVER) (AEROSOL)

REVISION DATE: 22-03-00
REVISION No. /REPLACES SDS ISSUED: 7 / 07-08-00
SDS No.: 098-89/1247/1