

SAFETY DATA SHEET

ARDROX 6367

1 IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY

PRODUCT NAME: ARDROX 6367

PART No.: A6367---

APPLICATIONS: Chemical process for cleaning gas turbine engine compressors.
Label description - Turbine compressor cleaner.

SUPPLIER: Chemetall PLC
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2 COMPOSITION/INFORMATION ON INGREDIENTS

INGREDIENT NAME	CAS No.	CONTENTS	HEALTH (class)	RISK (R No.)
N-OLEOYL SARCOSINE	110-25-8	1-5 %	Xi, N	36/38, 50/53
TRIETHANOLAMINE SEBACATE		1-5 %	Xi	36/38
TRIETHANOLAMINE SALT OF DICARBOXYLIC FATTY ACID (198092)	84235-46-1	1-5 %	Xi	36/38
ALCOHOL ETHOXYLATE (177082)	68131-40-8	1-5 %	Xn	22, 41

COMPOSITION COMMENTS: This product contains additional ingredients which are either unclassified or below the concentration requiring declaration under the CHIP Regulations. The product is water-based.

In the ingredient list above, there are no exposure limit values for any ingredient.

3 HAZARDS IDENTIFICATION

Irritating to eyes.
May be irritating to skin.
The product will have a defatting action on skin.

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Contains a substance or substances classified as dangerous for the environment (N).

Contains a substance or substances classified as very toxic to aquatic organisms (R50).

Contains a substance or substances classified as harmful to aquatic organisms (R52).

Contains a substance or substances that may cause long-term adverse effects in the aquatic environment (R53).

4 FIRST AID MEASURES

INHALATION:	Not normally applicable to the product as supplied. If any ill effects occur while using the product, note the following. 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. If breathing stops, provide artificial respiration. Provide rest, warmth and fresh air. Get medical attention if ill effects persist or are severe.
INGESTION:	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.
SKIN:	Immediately remove contaminated clothing. Rinse the skin immediately with lots of 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:	This product is non-flammable.
TO BE USED:	Use extinguishing media appropriate for surrounding fire.
NOT TO BE USED:	None specific.

HAZARDOUS DECOMPOSITION PRODUCTS:

On heating to total decomposition, the following materials may be produced.
Ammonia or amines. Oxides of nitrogen. Oxides of carbon.

PROTECTIVE MEASURES IN FIRE:

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

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6 ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS DURING SPILL:

Evacuate the area and keep unauthorised people away from the spillage. 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:

Small spillages may be washed away with plenty of water, taking care to avoid generating excessive amounts of foam. Larger spillages should be washed into the effluent treatment plant or absorbed with sand, earth or mineral granules etc. The contaminated absorbent should then be transferred to polythene containers and disposed of via a licensed waste disposal contractor. Wash residues away with plenty of water. Care should be taken to avoid generating excessive amounts of foam. Clear up spillages promptly as they may lead to a slip hazard.

7 HANDLING AND STORAGE

USAGE PRECAUTIONS:

Avoid contact with the eyes. Avoid prolonged skin contact. Avoid inhalation of spray or mist from the working solution. Always wear the appropriate personal protective equipment when using or handling this product. Eyewash facilities must be available when handling this product. Do not eat or drink while handling or using this product. Do not ingest the product. Wash hands after use.

STORAGE PRECAUTIONS:

Store in a cool area. Keep away from oxidizing agents. Keep separate from food, feedstuffs, fertilizers and other sensitive material. Store and transport the product in its original container kept in an upright position. Keep containers closed when not in use. Containers of this product should be stored in a suitably designed or bunded area to minimise the risk of environmental pollution. Store between 2°C and 40°C.

8 EXPOSURE CONTROLS AND PERSONAL PROTECTION

INGREDIENT NAME	CAS No	STD	LT EXP (8 hrs)	ST EXP (15 min)
N-OLEOYL SARCOSINE	110-25-8		No std.	No std.
TRIETHANOLAMINE SEBACATE			No std.	No std.
TRIETHANOLAMINE SALT OF DICARBOXYLIC FATTY ACID (198092)	84235-46-1		No std.	No std.
ALCOHOL ETHOXYLATE (177082)	68131-40-8		No std.	No std.

PROTECTIVE EQUIPMENT:



VENTILATION:

General ventilation should be adequate to ensure operator exposure to the product ingredients is kept below acceptable limits.

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- RESPIRATORS:** Under normal conditions of handling the product as supplied, respiratory protective equipment should not be required. The following comments may apply to the use of the working solution. Wear suitable respiratory protection if exposed to high levels of spray or mist. In most cases, a disposable mask suitable for non-toxic aqueous mists would be satisfactory.
- PROTECTIVE GLOVES:** Wear impermeable gloves complying with an approved standard (eg. BS 1651 or EN374). Suitable gloves would be those manufactured from PVC or natural rubber.
- 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. Eyewash stations (and possibly safety showers) should be readily accessible near where this product is handled and used.

9 PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE:	Mobile, single phase liquid.		
COLOUR:	Clear. Pale straw.		
ODOUR/TASTE:	Odourless or no characteristic odour.		
SOLUBILITY DESCRIPTION:	Miscible with water. Immiscible with hydrocarbons and halogenated hydrocarbons.		
BOILING POINT (°C):	98	MELTING POINT (°C):	-1
SPECIFIC GRAVITY (Water=1):	1.02	pH-VALUE, CONC:	7.7

10 STABILITY AND REACTIVITY

- STABILITY:** Under normal conditions of storage and use, this product will be stable.
- CONDITIONS TO AVOID:** No specific conditions to avoid known, other than those involving non-intentional contact with the materials specified in the section 'Materials to Avoid'
- 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. This reaction is more likely to occur after loss of water from the product or being allowed to dry out. In this case, it could be vigorous or violent.
- HAZARDOUS DECOMPOSITION PRODUCTS:** On heating to total decomposition, the following materials may be produced. Ammonia or amines. Oxides of nitrogen. Oxides of carbon.

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11 TOXICOLOGICAL INFORMATION

TOXICOLOGICAL INFORMATION:

No specific toxicological tests have been carried out on this product.

HEALTH HAZARDS, GENERAL:

Irritating to eyes. This product has a defatting action on the skin. Prolonged or frequent skin contact may lead to irritation. Inhalation of spray or mist from the working solution may irritate the respiratory system.

INHALATION:

Inhalation of mist or spray from the working solution may cause the following symptoms. Irritation of the nasal tract and respiratory system.

INGESTION:

May cause the following symptoms. Irritation of the mouth, throat and digestive system. Nausea.

SKIN:

Product has a defatting effect on skin. Prolonged or frequent contact may lead to irritation, dryness and cracking.

EYES:

Irritation, watering, redness.

HEALTH WARNINGS:

ACUTE HEALTH EFFECTS:

A single exposure may lead to irritation of the following - the eyes and skin.

CHRONIC HEALTH EFFECTS:

Exposure to sublethal quantities over a prolonged period of time may lead to the following symptoms - skin dryness and cracking. No sensitising effects known.

12 ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL DATA:

Chemical Oxygen Demand (COD) (Chemical as supplied)	400000mg oxygen/litre
Biochemical Oxygen Demand (Chemical as supplied)	39500mg oxygen/litre

ENVIRONMENTAL HAZARDS:

Do not allow the product as supplied to enter local authority drains, waterways or sewers, or soil. Contact the local water authority for advice regarding dilute solutions and/or rinse waters. Agitation of high strength waste solutions may cause excessive foam. The product contains an ingredient or ingredients classified as 'Dangerous for the Environment' (N). The product contains an ingredient or ingredients classified as 'Very toxic to aquatic organisms' and 'May cause long-term adverse effects in the aquatic environment' (R50/53). The product contains an ingredient or ingredients classified as 'Harmful to aquatic organisms' and 'May cause long-term adverse effects in the aquatic environment' (R52/53).

Typical oxygen demand value(s) for this product or its solution can be found in Ecotoxicological Data above.

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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. Alkanolamine(s). Alkanolamine salt(s). Surfactant(s). Inhibitor(s). This product contains the following ingredients/ingredient types that are classified as slowly/poorly biodegradable. Inhibitor(s).

ACUTE FISH TOXICITY: No specific aquatic toxicity tests have been carried out on this product. Incomplete information available on the toxicity of the product ingredients to aquatic organisms. Based on the information available for some of the ingredients, this product is expected to be at least as follows - harmful to aquatic organisms (LC50/EC50/IC50=10-100 mg/l).

13 DISPOSAL CONSIDERATIONS

DISPOSAL METHODS: Prospective users of this product should contact their local water authority to ascertain their requirements for waste arising from the use of this type of material. In some cases, pH adjustment only (with eg. sodium carbonate/hydroxide or hydrochloric acid as appropriate), if necessary, may be acceptable prior to discharge to a foul sewer. Consideration should be given to the level of the following materials present in the effluent as these may require special treatment - oil and suspended solids. Alternatively, dispose of waste solutions via a licensed waste disposal contractor.

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.

Disposal of this product, solutions and any by-products should at all times comply with the requirements of the Environmental Protection Act and its subsidiary regulations and any regional local authority requirements.

14 TRANSPORT INFORMATION

LABEL FOR CONVEYANCE: No transport warning sign required.

ROAD:

RAIL:

SEA:

MARINE POLLUTANT: No.

AIR:

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15 REGULATORY INFORMATION

RISK PHRASES:	R-36	Irritating to eyes.
SAFETY PHRASES:	S-24/25	Avoid contact with skin and eyes.
	S-26	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
	S-36/37/39	Wear suitable protective clothing, gloves and eye/face protection.
	S-60	This material and its container must be disposed of as hazardous waste.

UK REGULATORY REFERENCES:

Health and Safety at Work Act 1974.
Control of Substances Hazardous to Health Regulations.
Chemicals (Hazard Information and Packaging for Supply) Regulations.
Environmental Protection Act.
Environmental Protection (Duty of Care) Regulations.
Control of Pollution (Special Waste) Regulations.
European Agreement Concerning The International Carriage of Dangerous 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:

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RECOMMENDED USES AND RESTRICTIONS:

This product is intended to be used industrially/commercially for the application

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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.

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

REVISION COMMENTS: Updated into new software program. The following sections contain revised or additional information.
2. 3. 4. 10. 11. 12. 13. 15.

REVISION DATE: 03-07-00

REVISION No. /REPLACES SDS ISSUED:
4 / 09-09-99

SDS No.: 00/2124/1