

# Safety Datasheet according to 2006/1907/EC

## 1. IDENTIFICATION OF PREPARATION OF COMPANY

### Product Information

Product Name:

CorrosionX Aviation

Revision Date: 25/10/2008

Supersedes Date: 10/01/2008

### Product Type and Use:

High Performance Anticorrosion Oil under Mil-Spec  
For Aircrafts or Aircraft Parts

### Manufacturer:

Scandex Aktiengesellschaft  
Fritz-Reuter-Str. 15  
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Tel: +49 (0)4331-30976  
Fax: +49 (0)4331-300266

**24 Hour Emergency Telephone:** CHEMTREC +1 703 5273887  
24 Hour Emergency + 49 (0)551-19240

## 2. HAZARDS IDENTIFICATION

Not applicable, see also Section 11 and 12

## 3. COMPOSITION / INFORMATION ON INGREDIENTS

### Chemical Characterization

Description:

CAS 64742-47-8	Petroleum naphtha	<9.0%
CAS 72623-85-9	Hydrotreated neutral oilbase	65-75%

**Additional information:** The text for R phrase codes shown above (if any) is given in section 16.

## 4. FIRST AID MEASURES

**General Advice:** CAUSES EYE AND SKIN IRRITATION. ASPIRATION MAY CAUSE LUNG DAMAGE. MAY CAUSE DIZZINESS AND DROWSINESS. KEEP AWAY FROM HEAT, SPARKS, FLAME. AVOID BREATHING VAPOR. AVOID CONTACT WITH EYES, SKIN AND CLOTHING. DO NOT SWALLOW. KEEP CONTAINER CLOSED. USE WITH ADEQUATE VENTILATION. WASH THOROUGHLY AFTER HANDLING. CAUTION! MAY CAUSE IRRITATION TO SKIN AND EYES. AVOID CONTACT WITH EYES, SKIN AND CLOTHING. WASH THOROUGHLY AFTER HANDLING: DO NOT INGEST:

**After Inhalation:** REMOVE FROM EXPOSURE AREA. REMOVE TO FRESH AIR. GIVE ARTIFICIAL RESPIRATION IF NOT BREATHING. GET MEDICAL ATTENTION.

**After Skin Contact:** WASH FROM SKIN WITH MILD SOAP AND WATER. REMOVE CONTAMINATED CLOTHING AND WIPE EXCESS FROM SKIN. WASH WITH SOAP AND WATER. GET MEDICAL ATTENTION.

**After Eye Contact:** FLUSH WITH WATER FOR AT LEAST 15 MIUTES. IF IRRITATION PERSISTS, SEEK MEDICAL ATTENTION. FLUSH EYES WITH PLENTY OF WATER FOR 15 MINUTES WHILE HOLDING EYELIDS OPEN. GET MEDICAL ATTENTION.

**After Ingestion:** IF CONSCIOUS, GIVE LARGE QUANTITIES OF WATER TO INDUCE VOMITING. GET MEDICAL ATTENTION. DO NOT INDUCE VOMITING. NO TREATMENT NECESSARY UNLESS LARGE QUANTITIES ARE INGESTED, THEN SEEK MEDICAL ADVICE.

## 5. FIRE FIGHTING MEASURES

**Suitable Extinguishing Media:** Carbon Dioxide, Dry Chemical, Foam

**For Safety Reasons NOT to be used:** Alcohol, Alcohol based solutions, any other media not listed above.

**Specific Risks Regarding the Product Itself or as a Result of Decomposition (including fumes):** PHENOLICS, CARBON MONOXIDE, WATER CARBON MONOXIDE, CARBON DIOXIDE

**Special Firefighting Protection Equipment:** FULL PROTECTIVE EQUIPMENT INCLUDING SELF CONTAINED BREATHING APPARATUS. FULL PROTECTIVE EQUIPMENT INCLUDING SELF CONTAINED BREATHING APPARATUS.

## 6. ACCIDENTAL RELEASE MEASURES

**Personal Safety Measures / Environmental Measures / Method of Cleaning / Containment:** USE RESPIRATORY PROTECTION EQUIPMENT AND IMPERVIOUS PROTECTIVE CLOTHING. ELIMINATE ALL SOURCES OF IGNITION. VENTILATE AREA IF INDOORS: DIKE AND CONTAIN SPILL. PUMP INTO SALVAGE TANKS AND/OR ABSORB WITH SUITABLE MATERIAL. USE SPARKLESS SHOVELS TO REMOVE MATERIAL. REMOVE ALL SOURCES OF IGNITION FROM THE SPILL AREA. EVACUATE ALL NON-ESSENTIA PERSONNEL UPWIND. SOAK UP SPILLED MATERIAL / SWEEP UP MATERIAL WITH ABSORBENTS AND PLACE IN A CONTAINER FOR DISPOSAL.

**Further Instructions:** Please refer to EU disposal requirements or country specific disposal requirements for this material.

## 7. HANDLING AND STORAGE

### Handling Conditions

**Instructions for Safe Handling:** PRACTICE GOOD CAUTION AND PERSONAL CLEANLINESS TO AVOID SKIN AND EYE CONTACT. AVOID BREATHING VAPORS OF HEATED MATERIAL: WASH THOROUGHLY AFTER HANDLING: REMOVE CONTAMINATED CLOTHING AND WASH BEFORE REUSE. USE WITH ADEQUATE VENTILATION. FOLLOW ALL MSDS/LABEL PRECAUTIONS EVEN AFTER CONTAINER IS EMPTY DUE TO RESIDUE. AVOID CONTACT.

**Special Industrial Hazards: Avoid:** EXCESS HEATING ,HIGH TEMPERATURES, SPARKS, OPEN FLAME, AND ALL OTHER SOURCES OF IGNITION

### Storage

**Storage Conditions:** STORE IN A COOL, DRY PLACE. KEEP CONTAINER CLOSED WHEN NOT IN USE. FOLLOW ALL MSDS/LABEL PRECAUTIONS EVEN AFTER CONTAINER IS EMTY BECAUSE IT MAY RETAIN RESIDUES.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**Further Information for Planning of Technical Installations:** PROVIDE ADEQUATE EXHAUST VENTILATION AND EXHAUST FILTER SYSTEM MAY BE REQUIRED. ADEQUATE GENERAL AND LOCAL EXHAUST.

### Ingredients with Occupational Exposure Limits (EU)

Name	%	LTEL ppm	STEL ppm	STEL mg/m3	LTEL mg/m3	OEL note	Company TLV
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**Further Advice:**

Refer to the regulatory exposure limits for the workforce enforced in each country. Some components may not have been classified at the EU level under the dangerous substances and preparations regulation. The “Company” published exposure limits listed above are for reference only, based on ACGIH Threshold Limit Values (TLV) or U.S. OSHA Permissible Exposure Limits (PEL).

**Personal Protection**

**Respiratory Protection:** NOT REQUIRED UNDER NORMAL CONDITIONS IN A WELL-VENTILATED WORKPLACE. IF NOT ADEQUATE USE APR RESPIRATOR W/OVAG CARTRIDGES. USE SCBA IN EMERG. NIOSH APPROVED AIR PURIFYING RESPIRATOR WITH ORGANIC VAPOR/ACID GAS CARTRIDGES.



**Hand Protection:** NITRILE RUBBER GLOVES. LATEX GLOVES. IN EMERGENCY SITUATIONS WEAR IMPERMEABLE GLOVES WITH CUFFS. SUITABLE PROTECTIVE CLOTHING, IMPERMEABLE GLOVES.

**Skin Protection:** AN EYEWASH SHOULD BE AVAILABLE TO THE AREA OF USE. SLICKER SUIT, RUBBER BOOTS IN SPILL RESPONSE SITUATIONS.



**Eye Protection:** CHEMICAL SAFETY GLASSES. SPLASH-PROOF GOGGLES. IN EMERGENCY SITUATIONS USE FULL FACE SHIELD. SAFETY GLASSES, GOGGLES, FACE SHEILD.

**Protection and Hygiene Measures:** ESTABLISH GOOD PERSONAL HYGIENE AND WORK PRACTICES. ALWAYS WASH HANDS AND FACE BEFORE EATING, DRINKING OR SMOKING. AVOID CONTACT WITH EYES AND SKIN.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance:</b>	Liquid
<b>Physical State:</b>	LIQUID
<b>Odor:</b>	SOLVENT
<b>Colour:</b>	GREEN
<b>Safety Relevant Data</b>	
<b>pH-Value:</b>	N/A
<b>Boiling Range:</b>	N.D. –
<b>Average Melting Point:</b>	
<b>Flash Point, F/C:</b>	132° C
<b>Danger of Explosion:</b>	None
<b>Lower Explosive Limit, vol%</b>	
<b>Upper Explosive Limit, vol%</b>	
<b>Sec DIN4</b>	
<b>Vapour Pressure, mmHg:</b>	N/D
<b>Viscosity:</b>	

**Solubility in water:** N/D  
**VOC Content g/l:** 3%

**Solvent Separation Test**  
Solid:

## 10. STABILITY AND REACTIVITY

**Stability:** STABLE AT AMBIENT TEMPERATURES. STABLE

**Conditions to Avoid:** EXCESS HEATING ABOVE 180 C OVER LONG PERIODS OF TIME DEGRADES THE RESIN HIGH TEMPERATURES, SPARKS, OPEN FLAME, AND ALL OTHER SOURCES OF IGNITION

**Hazardous Polymerization:** WILL NOT OCCUR. WILL NOT OCCUR BY ITSELF, BUT MASSES OF MORE THAN 1 LB OF PRODUCT + AN ALIPHATIC AMINE WILL CAUSE IRREVERSIBLE POLYMERIZATION W/CONSIDERABLE HEAT

**Materials to Avoid:** STRONGALKALIES, STRONG MINERAL ACIDS. BASES, ACIDS, AMINES AND OXIDIZING MATERIALS.

**Hazardous Decomposition Products:** PHENOLICS, CARBON MONOXIDE AND WATER MAY FORM: CARBON DIOXIDE, CARBON MONOXIDE.

## 11. TOXICOLOGICAL INFORMATION

### Toxicological Tests

There is no experimental data available on the product itself. However, it has been assessed according to the Gefahrstoffverordnung (preparations directive 88/379/EWG) and classified for toxicological hazards. See Section 15 for these details and associated risk and safety phrases.

### Practical Experiences

**Inhalation:** NO DATA

**Skin Contact:** NO DATA THE LD50 FOR SKIN ABSORPTION IN RABBITS IS 20,000 mg/kg

**Eye Contact:** No Information.

**Ingestion:** NO DATA. THE ORAL LD50 FOR RATS IS >5000 mg/kg

## 12. ECOLOGICAL INFORMATION

**Elimination Information:** BIODEGRADATION UNDER AEROBIC STATIC LABORATORY CONDITIONS IS BELOW DETECTABLE LIMITS (i.e. BOD LESS THAN 2.5% OF THEORETICAL) IN 20 DAYS.

### Further Ecological Information:

**Water Danger Class:** 0, none hazardous for water and fish

## 13. DISPOSAL CONSIDERATIONS

**Recommendation:** Smaller quantities can be disposed of with household waste.  
Do not cut or weld unclean drums.

## 14. TRANSPORT INFORMATION

Product is NO DANGEROUS GOOD

### Road Transport

ADR/RID Class:

ADR/RID Item:

UN-No.:

Proper Shipping Name:

Subsidiary Shipping Hazard:

### Sea Transport

IMDG/GGV See Class:

UN-No.:

EmS:

Page-No.:

Packing Group:

Proper Shipping Name:

Subsidiary Shipping Hazard:

Environmental Shipping Hazard:

Marine Pollutant:

### Air Transport

ICAO/IATA Class:

UN-No.:

Packing Group:

Shipping Name:

Subsidiary Shipping Hazard:

## 15. REGULATORY INFORMATION

### Classification

Sybol(s) of Produkt

### Named Chemicals on the Label

### Risk Phrase

R-26/37/38 irritation to eyes, respiratory System, skin

### Safety Phrase

S-2 Keep out of the reach of Children

S-16 Keep away from sources of ignition

S-62: If swallowed, do not induce vomiting: seek medical advice immediately and show label

## 16. OTHER INFORMATION

**Datasheet Produced by:** Scandex Engineering srl

**For further information, please contact:** Technical Services Department

The information on this sheet corresponds to our present knowledge. It is not a specification and it does not guarantee specific properties. The information is intended to provide general guidance as to health and safety based upon our knowledge of the handling, storage, and use of the product. It is not applicable to unusual or non-standard uses of the product or where instructions and recommendations are not followed.

## Product Data Sheet

### DESCRIPTION OF APPLICATION

*CorrosionX Aviation* forms a wet film, providing Long term protection against corrosion in most environments, exceeding 300 hours in salt spray testing (ASTM B-117). It is designed for virtually all kind of used and new machinery, vehicles, ships, drilling rigs and other industrial installations, as well as for lubrication application in severe corrosive environments. It is water displacing and offers extremely good penetrating properties.

### GENERAL INFORMATION

*CorrosionX Aviation* is an extremely effective corrosion inhibiting coating. Compared to other, conventional products, many advantages can be put forward. *CorrosionX Aviation* does not contain any Lead, Isocyanate or Cr6. Thanks to its Polar Bonding Technology it provides maximum adhesion to steel and extraordinary dielectric abilities isolating the anode and the cathode. It does not require sandblasting before the treatment and is easy to apply. This means a great cost benefit!

### CONDITIONS

Equipment may be used in all weather conditions, except under the waterline of ships and other immersed applications.

### PREPARATIONS

remove any rough soiling, if existent.

### THINNING

Never ever

### APPLICATION

Just spray *CorrosionX Aviation* inside the machinery, so that a long-term protection is achieved. If you have existing corrosion, we recommend a treatment with *CorrosionX*, on effected areas first, for a better penetration. *CorrosionX Aviation* will penetrate through it and stop the corrosion process!

For even better efficiency, we recommend our Treatment System.

### PROCESSING TEMPERATURE

+5°C to 50°C

### PERMANENT PROCESSING TEMPERATURE

-60° C up to +120° C

### TIME OF PROTECTION

The time of Protection in closed Systems is more than 2 Years utilizing *CorrosionX Aviation*

### REMOVAL

Under normal conditions *CorrosionX Aviation* does not need to be removed. Should that however become necessary, different measures should be taken in order to achieve the

percentage cleanliness needed. Where a dust dry surface is needed, you can, if the use of water is an option, e.g. on vehicles etc., use a high pressure water hose combined with a soap supply. Where the use of water is not an option, the surface in question should be rubbed dry with a cloth. Where the percentage of cleanliness is needed to allow repainting of the surface in question, CorrosionX Aviation is to be removed with a solvent. For this purpose we recommend acetone or CleanX Formula G

## **OTHER**

Please follow the instructions for use, specified by the manufacturer.

Please pay attention to our safety data sheets and our product data sheets.

## **Safety**

Read and follow all caution statements on this product data sheet and on the MSDS for this product. Employ normal workmanlike safety precautions. Hypersensitive persons should wear protective clothing, gloves and use protective cream on face, hands and all exposed areas.

## **Ventilation**

When used as a tank lining or in enclosed areas, thorough air circulation must be used during and after application until the coating is cured. The ventilation system should be capable of preventing the solvent vapour concentration from reaching the lower explosion limit for the solvents used. In addition to ensuring proper ventilation, appropriate respirators must be used by all application personnel.

## **Caution**

This product contains flammable propellents (aerosols only). Keep away from sparks and open flames. All electrical equipment and installations should be made and grounded in accordance with the National Electric Code. In areas where explosion hazards exist, workmen should be required to use non-ferrous tools and wear conductive and non-sparking shoes.

## **Additional Product Data CorrosionX Aviation**

Specific Gravity @15.6°C	0.880
Viscosity, cSt @ 40°C	47.3
cSt @ 100°C	7.0
Flash Point c.o.c.	142°C
Pour Point	-30°C
Boiling Point	>100°C
Volume Solids	96%
VOC	136 gm/L
Solubility in Water	slightly Emulsifiable
Film Thickness	0.003mm
Humidity Cabinet hrs.	>1320h
Dielectric Strength	>35000V
Anti-Wear 0.40mm	The smaller the number the better the performance. Standard lubricating oil have a value of 1.0 – 1.2
Storage: Bulk:	Store at room temperature (10°C and more) Aerosols not more than 50°C

Shelf Life: Bulk: Indefinite as long as container remains capped. Aerosols: 2 years.

### **Compatibility with other Materials**

Rubber: No visible effect on Buna-N, Viton or Neoprene. Slight swelling and/or softening of Butyl rubber items

Adhesives and Sealants: Usually no effect but some adhesives may soften and sealants with silicone may experience slight. Recommend a small test sample prior to widespread application.

Painted Surfaces: Paints typically used on aircrafts, automobiles and machinery are unaffected by CorrosionX. Polishes and some wax coatings may soften by the application of any hydrocarbon product.

Plastics: CorrosionX is compatible with most commonly-encountered plastics such as: Acrylic, Polyester, Nylon, Vinyl, Delrin, Formica; Polypropylene, Polyethylene. Should there be any question, when other types of plastic are involved, it is suggested a small sample be tested.

Fabrics: CorrosionX will be absorbed into the fibers of most fabrics, thereby creating slight staining. The stain is not permanent and may be removed with naphtha or mineral spirits.

Do not apply CorrosionX on Oxygen Systems or LCD Displays

## **CorrosionX Aviation Part numbers Major Aircraft Manufactures**

Boeing Company:	RM 016679
Cessna:	U074092
Lear Jet:	80102
Mc Donnell Helicopters:	RM010012
Sikorsky Aircraft Corporation:	Letter of Authorization
Raytheon:	Offers product as customer option
Piper Kassel:	Is using CorrosionX Aviation
US-Military:	MIL-C81309 E Type II
P&W :	has authorised the use on Engines



