Safety Datasheet according to 2006/1907/EC

1. IDENTIFICATION OF PREPARATION OF COMPANY

Product Information Product Name:	CorrosionX LowFrictionLub	Revision Date: 25/10/2008 Supercedes Date: 10/01/2008
Rrodukt Type and Use:	High Performance Anticorrosion Oil	under Mil-Spec
Manufacturer:	Scandex Aktiengesellschaft Fritz-Reuter-Str. 15 24782 Büdelsdorf Deutschland Tel: +49 (0)4331-30976 Fax: +49 (0)4331-300266	
24 Hour Emergency Telephone	: CHEMTREC +1 703 5273887 24 Hour Emergency + 49 (0)551-19	9240

2. HAZARDS IDENTIFICATION

Not aplicable, 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 ARTIFICAL 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	STEL	STEL	LTEL	OEL	Company
		ppm	ppm	mg/m3	mg/m3	note	TLV

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

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

Solubility in water:N/DVOC 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 ABSORPION 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:

<u>Air Transport</u> 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 iretation to eys, 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 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 displaceing and offers extremely good penetrating properties.

GENERAL INFORMATION

CorrosionX is an extremely effective corrosion inhibiting coating. Compared to other, conventional products, many advantages can be put forward. *CorrosionX* 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.

PREPARATONS

remove any rough soiling, if existent.

THINNING

Never ever

APPLICATION

Just spray CorrosionX 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 will penetrate through it and stop the corrosion process! For even better efficiency, we recommend our Treatment System.

PROCESSING TEMPERATURE

 $+5^{\circ}C$ to $50^{\circ}C$

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

REMOVAL

Under normal conditions CorrosionX 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 is to be removed with a solvent. For this purpose we recommend acetone.

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 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 solvents (aerosol 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

Specific Gravity @15.6°C	0.868	
Viscosity, cSt @ 40°C	31.7	
cSt @ 100°C	4.9	
Flash Point c.o.c.	142°C	
Pour Point	-30°C	
Boiling Point	>100°C	
Volume Solids	91.5%	
VOC	136 gm/L	
Solubility in Water	slightly Emulsifaiable	
Film Thickness	0.002mm	
Humidity Cabinet hrs.	>298h	
Dielectric Strenght	>35000V	
Anti-Wear 0.41mm 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; Polyproplene, 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