# Noxudol

# INTRODUCING NOXUDOLI

Noxudol is the latest news in car care products from rust protection to sound deadening products. Noxudol quality is unparalleled.

# SOUND DAMPING RUSTPROOFING



Easy to apply! Spray, brush or roll it!



noxudol undercoating is a permanent durable coating apply to the underbody of the vehicle sealing and insulates the car

EXPERIENCE THE COMFORT OF NOXUDOL!

# Rust proofing Agents



**Noxudol**—Is widely recognize as the leading brand in rust and sound proofing products in the automobile, marine, train and industrial industries. It's the preferred product when it comes to protect your investment such vehicle, boats and machinery. Our products are certified by name worthy institutions worldwide; furthermore have been tested and exposed under all climates and have successfully passed all certifications.

**Noxudol** is specially formulated and chemically balance to control rust and corrosion on new or old vehicles it works on cars of all ages and can substantially extend the life of vehicles. No car is to new or too old for our products.

- User and Environmental friendly
- Protects cavities against corrosion from inside out
- Advanced technology

- Wax based products offer long lasting adherence.
- Easy to apply
- Maintains vehicles trade-in and resale value

#### Noxudol 300—Solvent Free

A thick bodied anti corrosive for the chassis and under carriage of vehicles. It's chemically reinforced and added effective rust protective ingredients.

# Package size: 500 ml spray cans

1 Liter canisters 20 Liter can 60 Liter Drum 208 Liter Drum



#### Noxudol 700—Solvent Free

A thin bodied oil. It forms a waxy Water repellent anti-corrosive film With high penetration qualities.

#### Package size:

500 ml spray cans 1 Liter canisters 20 Liter can 60 Liter Drum 208 Liter Drum



#### Noxudol 900

A viscous underbody wheel housing Rust proofing agent. High adhesive Ratings water and moisture repellent. Excellent barrier for road salt etc.

#### Package size: 500 ml spray cans 1 Liter canisters 20 Liter can 60 Liter Drum 208 Liter Drum



#### Noxudol 750

A high penetrating thin liquid rust Protecting oil. Its specially formulated For the inner treatment [cavities] Of vehicles.

#### Package size:

500 ml spray cans 1 Liter canisters 20 Liter can 60 Liter Drum

208 Liter Drum



#### Noxudol 3100

A water based viscous elastic Sound damping paste based on polymer. Due to its elastic flexibility it converts Sound producing resonance into heat. Removes noise and vibration and it Contains anti-rust properties.

Package size: 20 Liter can



### **Factors contributing to rust:**

#### Factors attributable to monocoque construction

The development and improvement of spot-welding technology has let the automobile manufacturers to adopt a type of monocoque body construction offering numerous advantages. However, a monocoque body is constructed with welded steel sheets and thus has many gaps and lap joints. These structural characteristics make such body construction vulnerable to corrosion (rust).

- 1. Spot-welded areas have lap joints and gaps where water collects easily.
- 2. Heat from spot-welding melts the zinc coating on the rustproofed steel sheet, this causes the exposed untreated Material to rust.

#### Factors attributable to the external environment

External/environmental factors contributing to rust are worsening. The under floor of all vehicles (passenger cars, trucks and busses) which come in direct contact with ice-melting agents, are particularly vulnerable to "salt-damage".

- The spraying of large amounts of ice-melting agents (salt) in wintertime promotes and creates rust in vehicles, trucks and equipment machinery causing great damage to your investment.
- Each year the amounts of substances [chemicals] sprayed on the roads and highways increases dramatically.
- These chemicals are but not limited to sulfur dioxide, acid rain, nitrogen oxide, exhaust gas etc.









Accident and traffic prevention measurements are producing serious salt damages [rust and corrosion] to vehicles.

#### **Rust Prevention:**

#### By the vehicle manufacturer

Double-action rust-proofing technology, consisting of rustproofed steel sheet and the application of penetrating rustproof agent on interior surfaces, is proving particularly effective in the prevention of rusting and the progress-suppression of rust in new cars for up to three years from the time of application. More extensive rust control is also expected through improvements in body design, such as the increasing use of designs that prevent water from collecting.

#### **After market rust prevention**

Rust-proofing agents offering improved performance for new vehicles are now available for aftermarket vehicle maintenance programs where it is important to provide reliable rust-proofing protection using high-performance rustproofing agents consisting of the following:

- 1. Penetrating Rustproofing Agents (See Section IV)
- 2. Solvent-free Agents (See Section V)
- 3. Double-Layer Rustproofing Agents (See Section VI)

# **Types of rust [corrosion]:**

#### 1. <u>Uniform corrosion:</u>

• General rust that progresses uniformly over an exposed surface.

#### 2. **Bi-Metallic Corrosion:**

• Rust due to the electro-potential difference between two metals.

#### 3. <u>Local corrosion [rust] in welded areas:</u>

• Rust due to the electro-potential difference between the base material and the welded area where the material properties have changed.

#### 4. <u>Corrosion holes [pit and dent]:</u>

• Deep rust extending from relatively small openings; for example holes can be generated all the way through a differential case.

#### 5. **Gap Corrosion:**

• Rust can be generated by battery like circuits formed inside gaps occurring between facing surfaces in bolted or band-tightened areas.



Uniform corrosion (1)



Gap/local corrosion in welded areas [3] [5]



Bi metallic corrosion [2] [3] [5]



Local corrosion in welded areas(3)



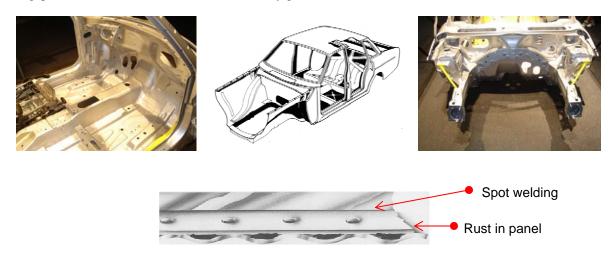
Corrosion hole [pit and dent]



Uniform Corrosion [1]

## Why the need for Penetrating Rustproofing Agents?

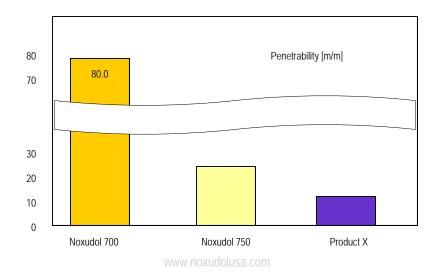
• A monocoque body [figure 1] is constructed with assembled steel sheets; therefore has many panes joints gaps and hollow structures where rust is readily generated.



A penetrating rustproofing agent is needed to treat this type of construction, because it can penetrate by capillary attraction into the spaces between even tightly connected metal sheets and into the corners of cavities and gaps.

**Noxudol 700** - Is a solvent free rust proofing agent offered within our wide variety of products. It provides excellent penetration abilities of 80 mm (over three inches from point of injection) which is higher than a similar product manufactured by company [X]. As shown in the test report (table 1) issued by the Japan Association of Corrosion Control proves that Noxudol 700 has outstanding penetration abilities.

Table 1. Illustrates the rustproof test results [penetrability] by the Japan Association of Corrosion Control



### Why the need for Penetrating Rustproofing Agents?

#### **Technology to Create Penetrating Force**

Traditional solvent-based rustproofing agents are subject to very quick volatilization of the solvent component, with 40 to 50 percent of overall volume lost to evaporation before the rustproofing agent reaches the surfaces to be protected. Moreover, solvent-based agents dry quickly not allowing enough time for the rustproofing agent to penetrate into joints, seams or gaps to the maximum extent possible.

On a vehicle where rust has already begun to form, it is particularly important for the rustproofing agent penetrate thoroughly over a long period in order to maximize delaying the progress of that rust.

If the rustproofing agent contains solvent, the solvent component penetrates the gaps first, followed by rust-suppressing component. The agent dries causing a coating layer that prevents the rust-suppressing component from covering the necessary areas as thoroughly.

In contrast our high penetration Solvent-free Noxudol 700 can penetrate even into minute spaces and cover the interior surfaces thoroughly. This product is manufactured to penetrate deep and to protect all necessary areas.

#### **Noxudol : Friendly technology to users, environment and vehicles**



We proudly developed and offer our Solvent Free products Noxudol 700 a high penetrating rustproof agent and the outstanding rustproof agent for the under coat Noxudol 300.

Noxudol products are user friendly requires no special "solvent protection gear" when applying our solvent free products . The application center requires no special ventilation system to eliminate the odor and mist caused by solvent base products which provides substantial savings in capital to the company or organization; Furthermore our products will not eat away the vehicle paint nor any rubber or plastic parts of the vehicle.

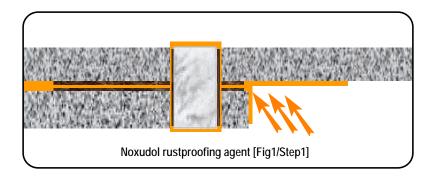
 The trend towards not using products that release pollutants into the environment is particularly strong in Europe. We strongly believe that other countries throughout the world also share the same believes and concerns. This is what distinguishes and part Noxudol from other alternative products. We take pride in our products customers and environment.

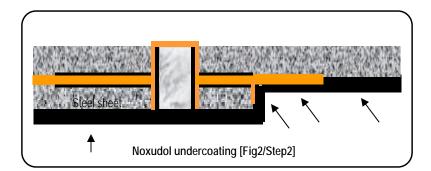
#### Reference facts:

• Volvo Car Corporation [Volvo AB] has successfully reduced the amount of solvent used in its factories by 550 tons each year by simply adopting a hot-melt system which proudly uses Noxudol products.

### **Need for Double-Layer Rust-proofing**

- The underbody of a vehicle with its panel joints, gaps and hollow structures is not suitable for a direct application of rustproof undercoat. This is because the weak penetration of the undercoat formula prevents penetration into the deepest corners of spaces or gaps, reducing the benefits of adhesion achieved by direct application.
  - A double-layer rust-proofing system is strongly recommended whereby a penetrating rustproofing
    agent offering high penetration is applied first in order to treat gaps thoroughly followed by a rustproofing undercoat agent.
- If rust [which cannot be removed] has already formed on the body a stronger rustproofing effect can still be achieved through a two-step process. First by covering the rusted area thoroughly with a penetrating rustproofing agent in order to delay the progress of rust [step1/Fig1] Second by then applying a rustproofing undercoat on top of the penetrating rustproofing agent [Step 2/Fig.2].





Noxudol recommends the following combination of rust proofing and undercoat agents.

UNDERCOAT	PENETRATING AGENT	
Noxudol 300	Noxudol 700	
Noxudol 900	Noxudol 750	

# **Example of Noxudol long-term effectiveness**



After seven years solvent free Noxudol 300 remains Soft and maintains its texture.



2 year bolt exposure test result: Top bolt was treated with Noxudol rustproofing agent. Bottom bolt was not treated and as a result it rusted.

### Prevent this from happening to your vehicle — Treat it with Noxudol







# **Noxudol products are:**

- **☑** User and environmental friendly
- ☑ Advanced technology
- **☑** Low odor
- **☑** Top quality at affordable prices
- ☑ Easy to apply





### **Company profile:**



- Manufacturer and developer of rustproofing products since 1928
- In 1963 becomes the official supplier to rustproofing products to Volvo AB.



Authorized distributor of Auson and Noxudol products 15934 S. Figueroa St. Gardena, CA 90248 USA Tel: 310.324.0149 Fax: 310.324.0386 Website: www.noxudolusa.com

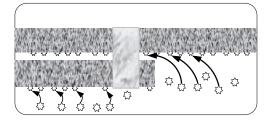
Noxudol®

# NOXUDOL RUSTPROOFING PROCEDURE

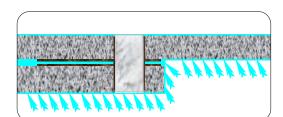


Noxudol—Soken Trade Corporation

15934 S. Figueroa St. Gardena Ca, 90248 Tel: (310) 324-0149 Fax: (310) 324-0386 Email: info@noxudolusa.com www.noxudolusa.com • The underbody of a vehicle is subjected to splashed deposits of mud, dirt, anti-freezing agents etc. Before undercoating the vehicle these deposits must be removed by steam cleaning or using a pressure washer machine. In particular carefully clean the inside of the wheel wells and the area around the suspension of the vehicle. After cleaning, allow the vehicle to fully dry or require use blower to speed the drying process.



Deposits of mud, dirt and salt



Cleaning removes these particles [mud-dirt and salt]



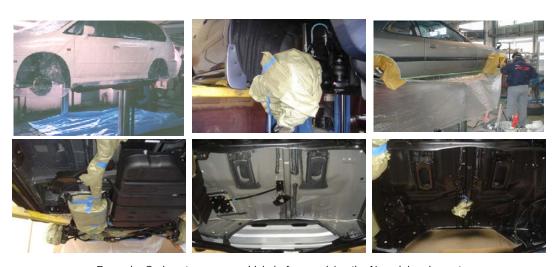
Steam or Pressure was the vehicle



Blow dry to speed drying process

#### Work access and surface protection

• Place the vehicle on a hydraulic lift or jack stands and remove the wheels to improve access for the application of the coatings. Mask off the bumpers and body surfaces you don't want to rustproof such as but not limited to muffler, exhaust pipes, brake disks, drums, calipers, etc.



Example: On how to cover a vehicle before applying the Noxudol undercoat

• We recommend inspecting the vehicle underfloor to verify that all the areas to be coated are dry and clean. Also check for any visible rust that can be found. If any old paint or old undercoat has been lifted due to rust scrape it off with a scraper or a wire brush. Once the rust has been removed repair any separated spot-welds or cracks.







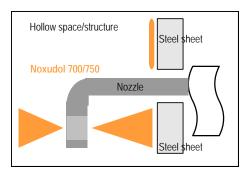
Example of underfloor of vehicle

#### Applying penetrating rust-proofing agents into hollow structures

- Apply Noxudol penetrating rustproofing agent inside the hollow sections or cavities of the vehicle. For example around the doors, pillars, fender
  interiors, side shields, hood and trunk lid etc. For better access remove any parts connected to or inside hollow sections, such as small lamps, and
  sun visors etc.
- As shown below the use of extension [flexible] tubing is required with its appropriate length and size enough to reach the dimensions of the target space. Insert the tube all the way into each cavity and inject the Noxudol rustproofing agent and as you spray the material gradually withdraw the tube



Insert the spray nozzle through water drains, panels or any available opening on the vehicle.



#### Application of rustproofing agents to the underfloor

Noxudol\*

• In order to accomplishing a double-layer rustproofing its necessary to apply the penetrating rust proofing agent inside the gaps along the bolted, spot-welded or panel jointed surfaces on the underfloor or to areas where rusting has already occurred. Allow few minutes for the agent to penetrate into the deepest parts of the gaps in order to prevent rust from being generated on these untreated areas. Once this is completed proceed to with







Rustproofing the interior cavities of the underfloor



Apply rust proofing agent to bolts, nuts etc. Any parts that shows Signs or rust or exposed to rust.

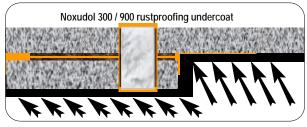


Rust proofing agent applied to joints, panels, welded spots etc.



Wipe out to remove any excess product before applying the undercoat.

#### Application of rustproofing undercoat to the underfloor







Application of Noxudol undercoat









Apply the undercoat rustproofing agent to the underfloor of the vehicle. Avoid applying material on muffler, exhaust etc. Make sure material is applied properly throughout vehicle and to its recommended thickness.

• The following are the manufacturers recommendations for further details contact your vendor.

Type of product	Product Name	Standard film thick- ness [microns]	Application Amount	Drying time Reference	Container Sizes
Penetrating Rust Proofing Agents	Noxudol 700	40 to 60	40 to 60	Non-Drying	500ml /1L/20L
	Noxudol 750	50	60 to 100	Non-Drying	500ml /1L/20L
Undercoat Rust Proofing Agents	Noxudol 300	100 to 250	100 to 250	Non-Drying	500ml/1L/20L
	Noxudol 900	150 to 350	250 to 600	Non-Drying	500ml/1L/20L



#### Noxudol is tradition and innovation delivers friendly technology to people and our environment





# Noxudol®

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# Noxudol 300 Spray

#### General

**Noxudol 300 Spray** is a **solvent free**, thick-bodied anti corrosive for the chassis. It is chemically reinforced and added effective rust protective ingredients. As the product is solvent free it dries chemically, starting after approx. 24 hours. The film will be through dry in 3-7 days, depending on temperature and film thickness.

#### **Range of application**

**Noxudol 300 Spray** is intended for the chassis and wheel housing of the vehicle. It works preventively against corrosive attacks and gives good protection for industrial products in long time outdoor storage. Effective against road salt, water and moisture repellent.

#### **Instructions for use**

Clean the surface from rust, paint and dirt, preferably with high pressure wash. Let dry thoroughly. Spray several layers where wear protection is wanted. Remove splashes with white spirit or degreaser soonest possible after treatment. Do not expose the chassis to heavy water splashes the first 24 hours. **Noxudol 300 Spray** needs longer time to dry and may therefore drip the first days at f.ex. the exhaust pipe or from the motor. Take this into consideration when choosing parking place.

#### **Technical data**

Consistence: thixotropic Type of film: waxy

Colour: black Density: 950 kg/m<sup>3</sup>

Application

temperature: best at 15-25°C

Recommended

film thickness:  $100 - 300 \,\mu\text{m}$ 

Drying time: 3-7 days
Effect on car enamel: none
Fire class: 1
Storage time: 1 year



Issue: 1999-01-20

# Noxudol 700 Spray

#### General

**Noxudol 700 spray** is a thin-bodied rust preventive oil **free from solvents**. Low viscosity bindning agents and additives have been combined to enable application at room temperature. It forms a soft, waxy, water repellent, anti corrosive film.

#### Range of application

**Noxudol 700 spray** is foremost intended for treatment of the cavities of motor vehicles according to the ML method. It may, however, also be used as transport and storage protection for machines, machine parts, beams, motor parts etc.

#### **Instructions for use**

Clean the surface from rust, paint and dirt. Let dry thoroughly. Spray 1-2 times. Use extension hoses for inner cavities. Splashes can be removed with white spirit or a degreasing agent. After about 24 hours the product starts drying to a fat, petroleum-like surface. The vehicle can be used directly after treatment.

#### **Technical data**

Removal:

Type of film: soft, waxy
Colour: ligh
Density: 0,91 g/cm³
Application
temperature: 15-30°C
Recommended
film thickness: 40-

40-60 μm degreaser based on white spirit, tenside or alkali base.

light brown

Fire class: 1 Storage time: 1 year



Issue: 1999-01-11

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# Noxudol 750 Spray

#### General

**Noxudol 750** is a thin-bodied anti-corrosive oil, based on mineral oils, waxes and rust inhibitors. After drying it forms a waxy, moisture repellent film, especially resistant towards detergents and degreasing agents. Effective against road salt.

#### Range of application

**Noxudol 750** is intended for treating the cavities of motor vehicles according to the ML-method. It also gives a good rust protection for iron and steel plates, beams, reserve parts, wires etc. and has good adherence properties even on previously rust treated surfaces.

#### **Instructions for use**

Clean the surface from rust, paint and dirt. Let dry thoroughly. Spray 1-2 times. Use extensible hoses for inner cavities. Splashes can be removed with white spirit or a degreasing agent. The car can be used directly after treatment.

#### **Technical data**

Type of film: waxy
Colour: lightbrown
Density: 0.91 g/cm³

Recommended

film thickness: 20-40 µm

Recommended

application temp: 15-30° C
Drying time: 1-4 hours
Solvent: white spirit

Effect on car enamel: none

Removal: degreaser based on

white spirit, tenside

or alkali base

Fire class:

Storage time: 1 year



Issue: 1999-01-19

Tel 310-324-0149

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# Noxudol 900 Spray

#### General

**Noxudol 900 Spray** is a thixotropic, chemically reinforced product added effective rust preventive ingredients.

#### Range of application

**Noxudol 900** is especially composed for the car chassis and wheel housing. It works preventively against corrosive attacks and gives good protection for industrial products in long time outdoor storage. Effective against road salt, water and moisture repellent.

#### **Instructions for use**

Clean the surface from rust, paint and dirt, preferably with high pressure wash. Let dry thoroughly. Prime rusty surfaces with Noxudol 750 first. Spray several layers where wear protection is wanted. Remove splashes with white spirit or degreaser. The car can be used directly after treatment.

#### **Technical data**

Consistence: thixotropic Type of film: elastic

Colour: black Density at 20° C: 1000 kg/m<sup>3</sup>

Film thickness:  $100-300 \mu m$ 

Recommended

application temp.: 15-25° C Effect on car enamel: none Fire class: 1 Storage time: 1 year



Issue: 1999-01-20

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#### **Product** information

# Noxudol 3100 Sprayable sound damping paste

#### General

**Noxudol 3100** is a waterborne viscous, elastic sound damping paste based on polymer. Due to its viscous elastic flexibility it converts sound producing resonance into heat.

**Noxudol 3100** should preferably be applied with sprayer, but could be painted on or applied by roller.

**Noxudol 3100** has very good adhesive qualities and is water-resistant when hardened.

**Noxudol 3100** contains anti corrosives and even gives some protection against condensation.

**Noxudol 3100** has a high damping factor despite low weight/unit area. Approx. half the weight compared with traditional bitumen carpets.

Noxudol 3100 has a high abrasion resistance.

#### Range of application

**Noxudol 3100** is a sound damping paste intended for metal and plastic in thickness between 0,5-5,0 mm, like car bodies, ships' hulls, ventilating ducts etc. The product effectively eliminates disturbing sounds.

#### **Instructions for use**

**Noxudol 3100** should only be applied on carefully cleaned surfaces. Untreated surfaces of steel in moist environment must be primed before treatment.

To apply 3100, use either a small spray gun with 1-lit plastic container normal air pressure or a bigger high-pressure pump, type Graco King. When using a high-pressure pump it is very important to switch off the pressure when not spraying. Max. interruption with pressure on -1 minute. After switching off, the pressure in the hose must also be let out by the pistol gun; otherwise the material will pack in the hose and be very difficult to remove. The pistol

gun ought to be front mounted, the hose reasonably wide and the needle as large as possible.

To achieve an effective resonance and sound damping, apply a smooth layer of 1,0-2,5 mm dry film, the thickness depending on the basis. If thicker film is desired we suggest application in two layers. The film thickness will also influence the drying time, normally 6-12 hours at room temperature. At lower temperatures or high humidity the drying time will increase considerably.

The product sets in two steps. First the water evaporates, and then a chemical hardening takes place during the next 7-14 days, depending on the temperature. After the first step, the evaporation, the film is dry, manageable and already has a sound damping effect of around 80%. This effect increases during the chemical hardening.

Only after the film has hardened (7-14 days) Noxudol 3100 is water and frost resistant and can then also be top coated with most paint. A practical test has to be done first on a smaller area to make sure that the paste withstands the paint.

#### **Technical data**

Type of film: solid after drying

Colour: beige

Density:  $990\pm30 \text{ kg/m}^3$ Dry content:  $64\pm2\%$ 

Flash point:  $> 212^{\circ}F (100^{\circ} C)$ 

Cleaning and dilution: water

Applying method: Sprayed, painted or rolled Applying temperature: 60.8 - 86° F (16-30° C)

Spray nozzle airless: 0,025-0,045

Film thickness: 0.04-0.10in (1.0-2.5mm) dft Consumption of material: 0.31-0.82lbs/ft² (1.5-4kg/m²) Storing temperature: 35.6-86° F (+2-+30° C)

Storing time: 12 months

Dry film heat resistance: Max 212° F (100°C)

Abrasion resistance: Tested at 800 ym, 23°, 5 h with

coarse gravel according to "Daimler Benz steinschlag prüf

gerät" without puncture.

Moisture pickup: 3% according to

STD 1027,3375

N-54

Issue 020813 replaces 010313

These instructions and information are for guidance only and are given without obligation. If there is some confusion we recommend that you do your own tests and ask for advise in writing from us.

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