



# SAFETY DATA SHEET

9901 Activator for 9900 Rust-O-Thane®

## 1. Identification of the preparation and of the company

**Product name and/or code** : 9901 Activator for 9900 Rust-O-Thane®  
**Product use** : Andrews Coatings Ltd. Carver Building, Littles Lane  
**Manufacturer** : Wolverhampton, West Midlands, WV1 1JY  
**Emergency phone:** Telephone Number: 01902 429190, Fax Number: 01902 426574  
 Email: sales@andrewscoatings.co.uk

## 2. Composition/information on ingredients

Substances presenting a health or environmental hazard within the meaning of the Dangerous Substances Directive 67/548/EEC.

Chemical name*	CAS no.	%	EC nr.	Classification
<b>United Kingdom (UK)</b>				
Hexamethylene-di-isocyanate prepolymer	28182-81-2	50 - 100	500-060-2	R43
Solvent naphtha (petroleum), light aromatic	64742-95-6	2.5 - 5	265-199-0	R10 Xn; R65 Xi; R37 R66 N; R51/53
n-Butylacetate	123-86-4	2.5 - 5	204-658-1	R10 R66, R67
See section 16 for the full text of the R-phrases declared above				

Occupational exposure limits, if available, are listed in section 8.

## 3. Hazards identification

The preparation is classified as dangerous according to Directive 1999/45/EC and its amendments.

**Classification** : R10  
 R43  
 R52/53  
**Physical/chemical hazards** : Flammable.  
**Human health hazards** : May cause sensitization by skin contact.  
**Environmental hazards** : Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.  
**Additional warning phrases** : Contains isocyanates. See information supplied by the manufacturer. This information is provided by the current Safety Data Sheet.

## 4. First aid measures

### First aid measures

**General** : In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person.  
**Inhalation** : Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Give nothing by mouth. If unconscious, place in recovery position and seek medical advice.  
**Skin contact** : Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognized skin cleanser. Do not use solvents or thinners.  
**Eye contact** : Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open.  
**Ingestion** : If swallowed, seek medical advice immediately and show this container or label. Keep person warm and at rest. Do not induce vomiting.

## 5. Fire-fighting measures

- Extinguishing media** : Recommended: alcohol-resistant foam, CO<sub>2</sub>, powders, water spray or mist.  
Not to be used : water jet.
- Recommendations** : Fire will produce dense black smoke. Exposure to decomposition products may cause a health hazard. Appropriate breathing apparatus may be required. Cool closed containers exposed to fire with water. Do not release runoff from fire to sewers or waterways.
- Hazardous combustion products** : Decomposition products may include the following materials:  
carbon oxides

## 6. Accidental release measures

- Personal precautions** : Exclude sources of ignition and ventilate the area. Avoid breathing vapor or mist. Refer to protective measures listed in sections 7 and 8.
- Spill** : Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see section 13). Place in a suitable container. The contaminated area should be cleaned immediately with a suitable decontaminant. One possible (flammable) decontaminant comprises (by volume): water (45 parts), ethanol or isopropyl alcohol (50 parts) and concentrated (d: 0,880) ammonia solution (5 parts). A non-flammable alternative is sodium carbonate (5 parts) and water (95 parts). Add the same decontaminant to the remnants and let stand for several days until no further reaction in an unsealed container. Once this stage is reached, close container and dispose of according to local regulations (see section 13). Do not allow to enter drains or watercourses. If the product contaminates lakes, rivers, or sewers, inform the appropriate authorities in accordance with local regulations.

**Note:** see section 8 for personal protective equipment and section 13 for waste disposal.

## 7. Handling and storage

**Persons with a history of asthma, allergies or chronic or recurrent respiratory disease should not be employed in any process in which this product is used.**

**Examination of lung function should be carried out on a regular basis on persons spraying this preparation.**

- Handling** : Vapors are heavier than air and may spread along floors. Vapors may form explosive mixtures with air. Prevent the creation of flammable or explosive concentrations of vapors in air and avoid vapor concentrations higher than the occupational exposure limits.

In addition, the product should only be used in areas from which all naked lights and other sources of ignition have been excluded. Electrical equipment should be protected to the appropriate standard.

To dissipate static electricity during transfer, ground drum and connect to receiving container with bonding strap. Operators should wear antistatic footwear and clothing and floors should be of the conducting type.

Keep container tightly closed. Precautions should be taken to minimize exposure to atmospheric humidity or water. CO<sub>2</sub> will be formed, which, in closed containers, could result in pressurization. Care should be taken when re-opening partly-used containers. Keep away from heat, sparks and flame. No sparking tools should be used.

Avoid contact with skin and eyes. Avoid the inhalation of dust, particulates, spray or mist arising from the application of this preparation. Avoid inhalation of dust from sanding.

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking.

Put on appropriate personal protective equipment (see section 8).

Comply with the health and safety at work laws.

- Storage** : Store in accordance with local regulations. Observe label precautions. Do not store above the following temperature: 35°C (95°F). Store in a cool, well-ventilated area away from incompatible materials and ignition sources. Keep away from heat and direct sunlight.

Keep away from: oxidizing agents, strong alkalis, strong acids, amines, alcohols, water.  
No smoking. Prevent unauthorized access. Containers that have been opened must be carefully resealed and kept upright to prevent leakage.  
Do not empty into drains.

## 8. Exposure controls/personal protection

Persons with a history of asthma, allergies or chronic or recurrent respiratory disease should not be employed in any process in which this product is used.

Examination of lung function should be carried out on a regular basis on persons spraying this preparation.

**Engineering measures** : Provide adequate ventilation. Where reasonably practicable, this should be achieved by the use of local exhaust ventilation and good general extraction. Air-fed protective respiratory equipment must be worn by the spray operator, even when good ventilation is provided. In other operations, if local exhaust ventilation and good general extraction are not sufficient to maintain concentrations of particulates and solvent vapors below the OEL, suitable respiratory protection must be worn. (See Personal Protection.)

<u>Ingredient name</u>	<u>Occupational exposure limits</u>
<b>United Kingdom (UK)</b>	
Solvent naphtha (petroleum), light aromatic	<b>EH40-WEL (United Kingdom (UK), 6/2005). Notes: Trimethylbenzene, all isomers</b> TWA: 125 mg/m <sup>3</sup> 8 hour(s). TWA: 25 ppm 8 hour(s).
n-Butylacetate	<b>EH40-WEL (United Kingdom (UK), 1/2005).</b> STEL: 966 mg/m <sup>3</sup> , 0 times per shift, 15 minute(s). Form: All forms STEL: 200 ppm, 0 times per shift, 15 minute(s). Form: All forms TWA: 724 mg/m <sup>3</sup> , 0 times per shift, 8 hour(s). Form: All forms TWA: 150 ppm, 0 times per shift, 8 hour(s). Form: All forms

### Exposure controls

**Occupational exposure controls** : Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

**Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

**Respiratory protection** : Recommended: Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. In case of insufficient ventilation, wear suitable respiratory equipment. When spraying wear suitable respiratory equipment : supplied-air respirator (EN 138) .  
By other operations than spraying, in well ventilated areas, air-fed respirators could be replaced by a combination charcoal filter and particulate filter mask.  
-organic vapor (Type AX) and particulate filter (EN 140).

**Hand protection** : >8 hours (breakthrough time): gloves: polyvinyl alcohol (PVA) or nitrile rubber (EN 374-1)

**Eye protection** : Recommended: safety glasses with side-shields (EN 166) .

**Skin protection** : Recommended: Wear overalls or long sleeved shirt. (EN 467)

**Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

### Environmental exposure controls

Do not allow to enter drains or watercourses.

## 9. Physical and chemical properties

<b>Physical state</b>	: Liquid.
<b>Odor</b>	: Solvent-like.
<b>Color</b>	: Yellowish.
<b>Flash point</b>	: Closed cup: 53°C (127.4°F)
<b>Boiling point</b>	: 160°C (320°F)
<b>Explosion limits</b>	: Lower: 1% Upper: 7.5%
<b>Vapor pressure</b>	: 1.2 kPa (9 mm Hg)
<b>Vapor density</b>	: >1 [Air = 1]
<b>Evaporation rate (butyl acetate = 1)</b>	: 0.8 (Butyl acetate. = 1)
<b>Volatility %</b>	: 14% (v/v), 10% (w/w)
<b>VOC content w/w</b>	: 498 (g/l).

## 9. Physical and chemical properties

<b>Solubility</b>	: Insoluble in the following materials: cold water and hot water.
<b>Relative density</b>	: 1.13
<b>Viscosity</b>	: Dynamic: 650 mPa·s (650 cP)

## 10. Stability and reactivity

Stable under recommended storage and handling conditions (see section 7).

Hazardous decomposition products: smoke, carbon monoxide, carbon dioxide, oxides of nitrogen, hydrogen cyanide.

Keep away from the following materials to prevent strong exothermic reactions: oxidizing agents, strong alkalis, strong acids, amines, alcohols, water.

Uncontrolled exothermic reactions occur with amines and alcohols.

The product reacts slowly with water, resulting in the production of carbon dioxide. In closed containers, pressure buildup could result in distortion, expansion and, in extreme cases, bursting of the container.

## 11. Toxicological information

Based on the properties of the isocyanate components and considering toxicological data on similar preparations, this preparation may cause acute irritation and/or sensitization of the respiratory system, leading to an asthmatic condition, wheezing and tightness of the chest. Sensitized persons may subsequently show asthmatic symptoms when exposed to atmospheric concentrations well below the OEL. Repeated exposure may lead to permanent respiratory disability.

Exposure to component solvent vapor concentrations in excess of the stated occupational exposure limit may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, loss of consciousness.

Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin, resulting in non-allergic contact dermatitis and absorption through the skin. Repeated or prolonged contact with irritants may cause dermatitis. If splashed in the eyes, the liquid may cause irritation and reversible damage.

Contains Hexamethylene-di-isocyanate prepolymer. May produce an allergic reaction.

### Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Hexamethylene-di-isocyanate prepolymer	LD50 Oral	Rat	>5000 mg/kg	-
	LC50 Inhalation	Rat	18500 mg/m <sup>3</sup>	1 hours
	Dusts and mists			
Solvent naphtha (petroleum), light aromatic	LD50 Dermal	Rabbit	>2000 mg/kg	-
	LD50 Oral	Quail	>2150 mg/kg	-
	LD50 Oral	Mouse	8400 mg/kg	-
	LC50 Inhalation	Rat	29 mg/L	4 hours
	Vapor			
n-Butylacetate	LD50 Dermal	Rabbit	>17600 mg/kg	-
	LD50 Oral	Mammal	4300 mg/kg	-
	LD50 Oral	Rat	10768 mg/kg	-
	LC50 Inhalation	Rat	9.7 mg/L	4 hours
	Vapor			
	LC50 Inhalation	Mouse	6000 mg/m <sup>3</sup>	2 hours
	Vapor			
	LC50 Inhalation	Rat	2000 ppm	4 hours
Vapor				
LCLo Inhalation	Guinea pig	67000 mg/m <sup>3</sup>	4 hours	
Vapor				

## 12. Ecological information

There is no data available on the preparation itself.  
Do not allow to enter drains or watercourses.

The preparation has been assessed following the conventional method of the Dangerous Preparations Directive 1999/45/EC and is classified for eco-toxicological properties accordingly. See sections 2 and 15 for details.

### Aquatic ecotoxicity

Product/ingredient name	Test	Result	Species	Exposure
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## 12. Ecological information

Hexamethylene-di-isocyanate prepolymer	-	Acute LC50 >100 mg/l	Fish - Zebra barbel (brachydanio rerio)	96 hours
Solvent naphtha (petroleum), light aromatic	-	Acute IC50 1 to 10 mg/L	Algae	72 hours
	-	Acute LC50 18 mg/L	Fish - Trout - Oncorhynchus	96 hours
	-	Acute LC50 21 mg/L	Daphnia	24 hours
n-Butylacetate	Behavior	Acute EC50 19 mg/L	Fish - Fathead minnow (pimephales promelas)	48 hours
	Mortality	Acute LC50 100 mg/L	Fish - Bluegill sunfish (lepomis macrochirus)	96 hours
	Mortality	Acute LC50 18 mg/L	Fish - Fathead minnow (pimephales promelas)	96 hours

### Ecological information

<u>Product/ingredient name</u>	<u>Aquatic half-life</u>	<u>Photolysis</u>	<u>Biodegradability</u>
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Hexamethylene-di-isocyanate prepolymer	-	-	Not readily
Solvent naphtha (petroleum), light aromatic	-	-	Readily

### Bioaccumulative potential

<u>Product/ingredient name</u>	<u>LogP<sub>ow</sub></u>	<u>BCF</u>	<u>Potential</u>
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Solvent naphtha (petroleum), light aromatic	3.7 to 4.5	-	high
n-Butylacetate	1.79 to 2.06	-	low

## 13. Disposal considerations

Do not allow to enter drains or watercourses. Residues in empty containers should be neutralized with a decontaminant (see section 6).

Dispose of according to all federal, state and local applicable regulations.


**European waste catalogue (EWC)** : The European Waste Catalogue classification of this product, when disposed of as waste, is: 08 01 11\* waste paint and varnish containing organic solvents or other dangerous substances. If this product is mixed with other wastes, this code may no longer apply. If mixed with other wastes, the appropriate code should be assigned. For further information, contact your local waste authority.

**Hazardous waste** : Yes.

## 14. Transport information


**Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

### International transport regulations

Regulatory information	UN number	Proper shipping name	Classes	PG*	Label	Additional information
<b>ADR/RID Class</b>	--	-	-	-		<b>Remarks</b> Exempted according to 2.2.3.1.5 (Viscous substance exemption)
<b>IMDG Class</b>	1263	Paint. (n-butyl acetate)	3	III		<b>Emergency schedules (EmS)</b> F-E, S-E  <b>Remarks</b> Exempted according to 2.3.2.5 (Viscous substance exemption)
<b>IATA Class</b>	1263	Paint. (n-butyl acetate)	3	III		<b>Passenger and Cargo Aircraft</b> Quantity limitation: 60 L Packaging instructions: 309 <b>Cargo Aircraft Only</b> Quantity limitation: 220 L Packaging instructions: 310 <b>Limited Quantities - Passenger Aircraft</b> Quantity limitation: 10 L Packaging instructions: Y309  <b>Special provisions:</b> A72

PG\* : Packing group

## 15. Regulatory information

<b>EU regulations</b>	: The product is classified and labelled for supply in accordance with the Directive 1999/45/EC as follows:
<b>Hazard symbol(s)</b>	:  Irritant
<b>Risk phrases</b>	: R10- Flammable. R43- May cause sensitization by skin contact. R52/53- Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
<b>Safety phrases</b>	: S23- Do not breathe vapor. S24- Avoid contact with skin. S37- Wear suitable gloves. S51- Use only in well-ventilated areas. S56- Dispose of this material and its container at hazardous or special waste collection point. S61- Avoid release to the environment. Refer to special instructions/safety data sheet.
<b>Contains</b>	: Hexamethylene-di-isocyanate prepolymer
<b>Europe inventory</b>	: <b>Europe inventory:</b> All components are listed or exempted.
<b>Other EU regulations</b>	
<b>Additional warning phrases</b>	: Contains isocyanates. See information supplied by the manufacturer. This information is provided by the current Safety Data Sheet.
<b>CN code</b>	: 3208 90 91
<b>National regulations</b>	


## 16. Other information

<b>CEPE Classification</b>	: 5
<b>Full text of R-phrases referred to in sections 2 and 3 - United Kingdom (UK)</b>	: R10- Flammable. R65- Harmful: may cause lung damage if swallowed. R37- Irritating to respiratory system. R43- May cause sensitization by skin contact. R66- Repeated exposure may cause skin dryness or cracking. R67- Vapors may cause drowsiness and dizziness. R51/53- Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. R52/53- Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

The information in this Safety Data Sheet is required pursuant to EU Directive 91/155/EEC and its amendments.

### Notice to reader

*The information in this SDS is based on the present state of our knowledge and on current laws. The product is not to be used for purposes other than those specified under section 1 without first obtaining written handling instructions. It is always the responsibility of the user to take all necessary steps to fulfill the demands set out in the local rules and legislation. The information in this SDS is meant to be a description of the safety requirements for our product. It is not to be considered a guarantee of the product's properties. ©Copyright by Rust-Oleum Netherlands B.V. / Martin Mathys B.V.*

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