



MATERIAL SAFETY DATA SHEET

1. IDENTIFICATION OF PREPARATION AND COMPANY

INTERIOR PRODUCTS

**SIKKENS RUBBOL WP 151 (base)
HARDENER FOR SIKKENS RUBBOL WP 151**

Product type: Water-borne two pack polyurethane primer
Fields of use: For spray application onto exterior joinery
Application: By spray

**AKZO NOBEL SPECIALIST COATINGS
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Akzo Nobel Specialist Coatings is a trading division
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2. COMPOSITION/INFORMATION ON INGREDIENTS

Substances presenting a health hazard within the meaning of the Chemicals (Hazard, Information and Packaging) Regulations or assigned occupational exposure limits.

Hazardous Substance	Concentration Range %	Warning Symbol	Risk Phrases*
<u>SIKKENS RUBBOL WP 151 (base)</u> N-methyl-2-pyrrolidone	5-10%	Xi	R36/38
<u>HARDENER FOR SIKKENS RUBBOL WP 151</u> Prepolymerised isocyanates (HDI) Methoxy propyl acetate Monomeric HDI	80-90% 10-20% 0.1-1%	Xn Xi T	R42/43 R36 R23, R36/37/38, R42/43

- For full text see section 16

3. HAZARDS IDENTIFICATION

SIKKENS RUBBOL WP 151 (base): This product is not classified dangerous for supply according to the CHIP regulations.

HARDENER FOR SIKKENS RUBBOL WP 151: This product contains isocyanates. May cause sensitisation by inhalation and skin contact. Individuals with asthmatic problems should avoid exposure.

4. FIRST-AID MEASURES

General: In all cases of doubt or when symptoms persist seek medical attention and show this data sheet. Never give anything by mouth to an unconscious person.

Inhalation: Remove to fresh air, keep the patient warm and at rest. If breathing has stopped, administer artificial respiration. Give nothing by mouth. If unconscious place in a prone position with head to the side (recovery position) and seek medical advice.

Eyes: Contact lenses should be removed. Irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart. Seek medical advice.

Skin: Remove contaminated clothing. Wash skin thoroughly with soap and water or use a proprietary skin cleanser. Do **NOT** use white spirit, thinners or other solvents.

Ingestion: If accidentally swallowed obtain immediate medical attention, preferably at the nearest hospital accident emergency unit. Show this safety data sheet. Keep at rest. Do **NOT** induce vomiting. If conscious give milk or water to drink.



5. FIRE-FIGHTING MEASURES

Extinguishing media:

Recommended: alcohol resistant foam, CO₂, powder, water spray/mist.

Not to be used: water jet

Recommendations:

As the product contains combustible organic components, fire will produce dense black smoke containing hazardous products of combustion (see Section 10). Decomposition products may be a hazard to health. Appropriate self-contained breathing apparatus may be required. Cool closed containers exposed to fire with water spray. Do not allow run-off from fire fighting to enter drains or water courses.

6. ACCIDENTAL RELEASE MEASURES

Sikkens Rubbol WP 151 (Base): Exclude sources of ignition and ventilate the area. Avoid breathing vapours. Floors may become slippery. Refer to protective measures listed in section 7 and 8. Contain and collect spillages with non-combustible adsorbent materials, e.g. sand, earth, vermiculite, diatomaceous earth and place in a clearly labeled suitable container for disposal in accordance with the waste regulations (see section 13). Do not allow to enter drains or water courses. Clean preferably with a detergent; avoid the use of solvents. If the product enters drains or sewers the local water company should be contacted immediately; in the case of contamination of streams, rivers or lakes, the Environment Agency.

Hardener for Sikkens Rubbol WP 151: Exclude sources of ignition and ventilate the area. Warn others of the dangers and exclude non-essential personnel. Avoid breathing vapours. Floors may become slippery. Refer to protective measures listed in Sections 7 and 8. Contain and collect spillages with non-combustible absorbent materials, e.g. sand, earth, vermiculite, diatomaceous earth and place in a clearly labelled suitable container. The contaminated area should be cleaned up immediately with a suitable decontaminant.

One possible (flammable) decontaminant comprises : water (45 parts by volume)/ ethanol or isopropanol (50 parts)/ concentrated (d:0.880) ammonia solution (5 parts). A non flammable alternative is sodium carbonate (5 parts)/ water (95 parts). Add the same decontaminant to any residues and allow to stand for several days in a non-sealed container until no further reaction occurs. Once this stage is reached, close the container and dispose of in accordance with waste regulations (see section 13). Do not allow to enter drains or water courses. If the product enters drains or sewers the local water company should be contacted immediately; in the case of contamination of streams, rivers or lakes, the Environment Agency.

7. HANDLING AND STORAGE

When combined, this two-component primer contains isocyanates. Persons with a history of asthma, allergies or chronic or recurrent respiratory disease should only be employed in processes in which this product is used under appropriate medical supervision.

Handling:

Use product only in accordance with the method stated in Section 1.

Solvent vapours are heavier than air and may spread along floors. They may form explosive mixtures with air. Prevent the creation of flammable or explosive concentrations of vapour in air and avoid vapour concentrations higher than the occupational exposure limits.

Additionally, 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. Keep the container tightly closed. Exclude sources of heat sparks and open flame.

Avoid skin and eye contact. Avoid inhalation of vapour.

Smoking, eating and drinking should be prohibited in areas of storage and use.

For personal protection see Section 8.

Never use pressure to empty; the container is not a pressure vessel.

Always keep in containers made of the same material as the supply container.

The accumulation of contaminated rags and dry overspray, particularly in spray booth filters, may result in spontaneous combustion.

Good housekeeping standards, regular safe removal of waste materials and regular maintenance of spray booth filters will minimize risks of spontaneous combustion and other fire hazards.

Precautions should be taken to minimize exposure to atmospheric humidity or water as carbon dioxide may be formed which, in closed containers can result in pressurization. Care should be taken when re-opening partly used containers.

The Manual Handling Operations Regulations may apply to the handling of containers of this product. Packs with a volume content of 5 litres or more may be marked with a maximum gross weight. The following guide weight indicators are given to enable users of this product at work to carry out assessments:

PACK SIZE	Sikkens Rubbol WP151 base 20 litre	Hardener for Sikkens Rubbol WP151 5 litre
GROSS WEIGHT DOES NOT EXCEED	25kg	7kg

7. HANDLING AND STORAGE (cont'd)

Storage:

Although the storage of these products is not subject to specific statutory requirements. The principles contained in the HSE's guidance note HS(G)51 'Storage of Flammable liquids in Containers' should be observed when storing this product.

Observe the label precautions. Store between 5 and 25°C in a dry, well ventilated place away from sources of heat, ignition and direct sunlight. No smoking. Prevent unauthorized access. Containers which are open should be properly resealed and kept upright to prevent leakage. The principles contained in the HSE's guidance note HS(G)71 'Storage of Packaged Dangerous Substances' should be observed when storing this product.

Store separately from oxidising agents and strongly alkaline and strongly acidic materials.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

All engineering control measures used to control exposure to hazardous substances must be selected, maintained, examined and tested to meet the requirements of the Control of Substances Hazardous to Health Regulations (COSHH). Similarly all personal protective equipment, including respiratory protective equipment, must be selected, issued and maintained to meet the requirements of COSHH. These requirements include the provision of any necessary information, instruction and training with regard to their use.

Special precautions should be taken during surface preparation of pre-1960s paint surfaces over wood and metal as they may contain harmful lead.

Exposure Controls:

Provide adequate ventilation. Where reasonably practicable, this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and/or solvent vapour below the occupational exposure limit, suitable respiratory protection must be worn (see below). Spray mist contains all ingredients in the product and inhalation must be avoided.

Exposure limit values:

Substance Name	Long term exposure limit 8 hour TWA		Short term exposure limit (STEL) 15 minute		(Notes)
	ppm	mg/m ³	ppm	mg/m ³	
1-methoxypropyl acetate	50	274	100	548	Sk, IOELV
Isocyanates, all (as-NCO)		0.02		0.07	Sen

The above occupational exposure limits are in accordance with guidance note EH 40/2002 from the HSE. Products marked with * the exposure limit is recommended by the supplier.

Notes:

- OES** - occupational exposure standard (EH40 table 2).
- SUP** - OEL assigned by the supplier of the substance.
- TWA** - time weighted average.
- Ppm** - parts per million.
- mg m-3** - milligrams per cubic metre.
- Sk** - indicates a risk of absorption through skin.
- STEL** - short term exposure limit.
- IOELV** - indicative occupational exposure limit value
- Sen** - indicates a respiratory sensitiser

Occupational Exposure Controls:

All personal protective equipment, including respiratory protective equipment, used to control exposure to hazardous substances must be selected and maintained to meet the requirements of the Control of Substances Hazardous to Health (COSHH) Regulations. These requirements include the provision of any necessary information, instruction and training with regard to their use.

Respiratory protection: Air-fed respiratory protective equipment should be worn if this product is sprayed. This should be in addition to other measures taken to reduce exposure (eg. In booth design and operation and process modification). Non essential personnel and unprotected people should be excluded from the area if exposure is possible.

When operators, whether spraying or not have to work inside a spray booth or enclosure, they should wear air-fed respiratory protective equipment during the spraying process and until such time as the spray mist has cleared. However, persons entering the spray booths or enclosures for short periods (less than 15 minutes) when spraying is taking place may be protected from inhaling the mist by wearing respirators with suitable filters. Care should be taken to ensure that the filters are changed in accordance with the suppliers instructions. The use of respirator is changed in accordance with the suppliers instructions. The use of a respirator is considered very much second choice to air-fed respiratory protective equipment.

Under cool dry conditions it is possible for the isocyanate to remain unreacted in the paint film for up to 30 hours after application. If dry flattening is unavoidable air-fed respiratory protective equipment should be used.



8. EXPOSURE CONTROLS/PERSONAL PROTECTION cont'd

Hand protection:	The instructions and information provided by the glove supplier on use, storage, maintenance and replacement must be followed. Where skin exposure is likely to occur, use synthetic rubber or PVC gloves. Seek advice from glove suppliers for appropriate types. Barrier creams may help to protect exposed areas of skin but are not substitutes for full physical protection. They should not be applied after exposure has occurred.
Eye protection:	Wear safety eyewear designed to protect against liquid splashes should be worn.
Skin Protection:	Personnel should wear protective clothing. Cotton or cotton/synthetic overalls or coveralls are normally suitable. Grossly contaminated clothing should be removed and the skin washed with soap and water or a proprietary skin cleaner. Regular skin inspection of all users of this product is recommended. ALWAYS WASH YOUR HANDS BEFORE EATING, SMOKING OR USING THE TOILET.

Environmental Exposure Controls:

See Section 12 for detailed information.

9. PHYSICAL AND CHEMICAL PROPERTIES

	Sikkens Rubbol WP 151 (base)	Hardener for Sikkens Rubbol WP 151
Physical state:	White viscous liquid	Viscous liquid
Flash point:	>100°C	59°C Abel closed cup
Viscosity:	110-130 secs Din 4 cup	Not available
Specific gravity: (Kg/l)	1.17 Kg/L @ 21°C	1.12 Kg/L @ 21°C
Solubility in water:	immiscible	immiscible

10. STABILITY AND REACTIVITY

Sikkens Rubbol WP 151 (base): Stable under recommended storage and handling conditions (see section 7). When exposed to high temperatures such as in a fire, these products may produce hazardous decomposition products such as smoke, carbon monoxide, carbon dioxide and oxides of nitrogen. Keep well away from oxidising agents, strongly alkaline and strongly acidic materials in order to avoid exothermic reactions.

Hardener for Sikkens Rubbol WP151: Stable under recommended storage and handling conditions (see section 7). In a fire, hazardous decomposition and products such as smoke, carbon monoxide, carbon dioxide and oxides of nitrogen, hydrogen cyanide, amines and alcohols may be produced. Keep well away from oxidising agents, strongly alkaline and strongly acidic materials. Uncontrolled exothermic reactions occur with amines and alcohols. The product reacts slowly with water resulting in evolution of carbon dioxide. In closed containers, pressure build up could result in distortion, blowing and extreme cases bursting of the container.

11. TOXICOLOGICAL INFORMATION

There are no data available on the product itself.

Inhalation

Sikkens Rubbol WP 151 (base): Exposure to organic solvent vapours may result in adverse health effects such as irritation of the mucous membrane and the respiratory system and adverse effects on the renal and central nervous systems. Symptoms include coughing, headache, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness.

Hardener for Sikkens Rubbol WP 151: Based on the properties of the isocyanate content of this product, respiratory exposure may cause acute irritation and/or sensitization of the respiratory system, resulting in asthmatic symptoms, wheezing and tightness of the chest. Sensitised persons may subsequently show asthmatic symptoms when exposed to airborne concentrations of isocyanates well below the occupational exposure limits. Repeated exposure may lead to permanent respiratory disability.

COSHH requires that persons exposed to products containing isocyanates, which are respiratory sensitizers are subject to appropriate health surveillance. Publications giving guidance on health surveillance are listed in section 16. Employees should be provided with a copy of the HSE pocket card containing information on isocyanate 2 pack spray paints.

Exposure to organic solvent vapours may result in adverse health effects such as irritation of the mucous membrane and the respiratory system and adverse effects on the renal and central nervous systems. Symptoms include coughing, headache, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness.

Skin

Solvents may cause some of the above effects by absorption through the skin. Repeated or prolonged contact with the product may lead to removal of natural fats from the skin resulting in non-allergic contact dermatitis and absorption through the skin.



11. TOXICOLOGICAL INFORMATION cont'd...

Eyes

Splashes in the eyes may cause irritation and reversible local damage.

Ingestion

Ingestion may result in the following effects: sore throat, abdominal pain, drowsiness, nausea, vomiting and diarrhoea. Other effects may be as described for exposure to vapours.

12. ECOLOGICAL INFORMATION

There are no data available on the preparation itself.

The product should not be allowed to enter drains or watercourses or be deposited where it can affect ground or surface waters. The Air Pollution Control requirements of regulation made under the Environmental Protection act may apply to the use of this product.

13. DISPOSAL CONSIDERATIONS

Sikkens Rubbol WP151 (base): Do not allow into drains or watercourses or dispose of where ground or surface waters may be affected. Wastes, including emptied containers, are controlled wastes and should be disposed of in accordance with regulations made under the Control of Pollution Act and the Environmental Protection Act.

Using the information provided in this safety data sheet, advice should be obtained from the relevant environment agency whether the Special Waste Regulations apply. Using the information provided in this safety data sheet, advice should be obtained from the Environment Agency as to how the special waste regulations apply. For further information, see "Waste Management - The Duty of Care - A Code of Practice" available from HMSO.

Hardener for Sikkens Rubbol WP151: Residues in empty containers should be neutralized with decontaminant (see section 6). Do not allow into drains or watercourses or dispose of where ground or surface waters may be affected. Wastes, including emptied containers, are controlled wastes and should be disposed of in accordance with regulations made under the Control of Pollution Act and the Environmental Protection Act.

Using the information provided in this safety data sheet, advice should be obtained from the relevant environment agency whether the Special Waste Regulations apply. Using the information provided in this safety data sheet, advice should be obtained from the Environment Agency as to how the special waste regulations apply. For further information, see "Waste Management - The Duty of Care - A Code of Practice" available from HMSO.

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.

Sikkens Rubbol WP151 (base) is not hazardous for transport

Hardener for Sikkens Rubbol WP151:

Transport only in accordance with ADR for road, RID for rail and IMO for sea.

UN No.	1263
UN Packaging Group	III
ADR/RID (Land)	Class 3
IMO (Sea)	Class 3
Marine Pollutant	No
Shipping name	Paint
EmS No	3-05

15. REGULATORY INFORMATION



These products are classified and labelled for supply in accordance with the CHIP Regulations as follows:

Sikkens Rubbol WP151 (base)

This product is determined as not being dangerous for supply according to the CHIP Regulations.

Hardener for Sikkens Rubbol WP151

HARMFUL

Contains: Hexamethylenediisocyanate prepolymer

Contains: Isocyanates – see information supplied by the manufacturer

Sensitisation by inhalation and skin contact

Do not breathe gas/fumes/vapour/spray

In case of insufficient ventilation, wear suitable respiratory equipment

Avoid contact with skin

After contact with skin, wash immediately with plenty of water

Wear suitable gloves

The information contained in this safety data sheet does not constitute the user's own assessment of workplace risks as required by other health and safety legislation. The provisions of the Health and Safety at Work etc. Act and the Control of Substances Hazardous to Health Regulations apply to the use of this product at work.

16. OTHER INFORMATION

Text of R-phrases from section 2:

R23 – Toxic by inhalation

R36/38 – Irritating to eyes and skin

R36/37/38 – Irritating to eyes, respiratory system and skin

R42/43 – Sensitisation by inhalation and skin contact

The information contained in this safety data sheet is provided in accordance with the requirements of the CHIP Regulations.

The product should not be used for purposes other than those shown in Section 1 without first referring to the supplier and obtaining written handling instructions. As the specific conditions of use of the product are outside the supplier's control, the user is responsible for ensuring that the requirements of relevant legislation are complied with.

Further guidance on OELs and assessment of occupational exposure to substances hazardous to health is given in 'EH40: Occupational Exposure Limits' published by the HSE.

The information contained within this safety data sheet is based on the present state of knowledge and current national legislation. It provides guidance on health, safety and environmental aspects of the product and should not be construed as any guarantee of the technical performance or suitability for particular applications.

Further information and advice can be found in:

The Control of Substances Hazardous to Health Regulations 1999 [SI 1999: 437], The Stationery Office COSHH Essentials: easy steps to control chemicals [HSG 193], HSE Books. Details of Control Guidance Sheets, which may be relevant to the particular conditions of use, can also be found in this publication.

The Manual Handling Operations Regulations 1992 [SI 1992: 2793], The Stationery Office.

Chemical Warehousing: Storage of Flammable liquids in Containers 'HSG51', HSE Books.

The Environmental Protection (Duty of Care) Regulations 1992 [SI 1992:2839]. The Stationery Office.

A Guide to Working with Solvents [INDG 272], HSE Books.

Breathe Freely, IND (G) 172

Surveillance of people with health risks at work, (ISBN 0 11 885574 3)

Isocyanates in the Paint Industry, British Coatings Federation

Respiratory Sensitisors and COSHH – a guide for employers, IND (G) 95

Isocyanates: health hazards and precautionary measures EH16

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