

**1. Identification of Company and Substance/Preparation**

Company/Supplier: Dr.-Ing Ritter Apparatebau GmbH  
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**1.1 Product Identification**

Product Name: Autin-B

**1.2 Company Identification****2. Ingredients Composition and Information****2.1 Chemical Characterization:**

Chemical Description: White Oil

**2.2 Hazardous Components:** Under authorised utilisation there is no danger in using this material, based upon current knowledge.

Classification according to the TRGS 220: Mixture.

Characterization: None

**3. Possible Hazards****3.1 Characterization of Hazards:** Under consideration of usual precautionary measures for use of mineral oil products, instructions for handling (section 7) and personal protection (section 8): No particular danger is known.**4. First-Aid Measures**

**4.1 General Advice:** Skin contact may cause skin irritation and the removal of skin fats. Change soiled clothing and shoes immediately.

**4.2 Inhalation:** Fresh air; usually no further remedies are required. Seek medical attention if symptoms persist.

**4.3 Skin Contact:** Wash skin thoroughly with soap and water.

**4.4 Eye Contact:** Washout thoroughly with water for at least 10 minutes. Afterwards, immediately seek medical attention.

**4.5 Ingestion:** Do not induce vomiting, danger of aspiration. Immediately seek medical attention.

**4.6 Medical Advice:** When swallowed or vomited there is a danger of mineral oil components entering the lungs.

**5. Fire-Fighting Measures**

**5.1 Extinguishing Agents:** Foam, CO<sub>2</sub>, dry powder, water mist and sand.

**5.2 Non-suitable Extinguishing Agents:** Water, never use strong water jets.

**5.3 Combustion Products:** Mainly CO<sub>2</sub>, CO and ash.

**5.4 Special Protective Equipment:** Breathing supply independent of surrounding air, body protection.

**5.5 Further Advice:** Cool endangered containers with water. Combustion residues and fire fighting materials should be disposed of in accordance with local regulations.

**6. Accidental Release Measures**

- 6.1 Personal Precautions** Hygiene: Regular, long or intensive skin contact should be avoided. Otherwise, protective clothing measures should be worn. Change soiled clothing and shoes immediately. Avoid inhalation of vapour and mist.
- 6.2 Environmental Protection Precautions:** If the product seeps into surface water, drainage or underground inform the responsible authorities. Prevent seepage into drainage system, cover drainage system. Stop flowing product through blockage with earth or some other type of suitable material.
- 6.3 Containment and Cleaning Methods:** Soak up leaked product with a suitable absorbent. Dispose of the soiled absorbent in accordance with local regulations.
- 6.4 Additional Information:** Spilled product may make surfaces slippery, especially in combination with water.

**7. Handling and Storage****7.1 Handling**

Tips for safe handling: Do not spill the product. When handling heavy containers use safety gloves and appropriate tools.

Personal Protection: Avoid contact with eyes. If splashing is likely to occur wear a full face visor or chemical goggles as appropriate. Use oil resistant boots and safety gloves.

Tips to Fire and Explosion Protection: Keep away from heat and other sources of ignition. Combustion Class according to DIN EN 2: B

**7.2 Storage**

Requirements on containers and storage rooms: Provide sufficient ventilation. Only use containers which are suitable for storing the product. Protect against seepage into the ground. Keep containers closed.

Tips for mixed storage: Do not store together with oxidants.

Other information on Storage Conditions: Keep away from heat sources.

Storage Class: 10 (flammable liquids) according to VCI-Concept.

Storage Stability: Given when the product is correctly stored between + 5 °C and + 40 °C.

**8. Exposure Controls/Personal Protection**

- 8.1 Tips for Design of Technical Equipment:** Relevant local regulations should be heeded when designing and operating technical equipment.

**8.2 Components that should be monitored at the Workplace**

Tip: Oil mist concentrations of 10 mg/m<sup>3</sup> should not be exceeded.

**8.3 Personal Protection**

General Protection: Regular, long or intensive skin contact should be avoided. Otherwise, take protective measures. Change soiled clothing and shoes immediately. Do not place soiled or wet rags into pockets. Do not eat, drink, smoke or blow your nose while working at the machine. Do not throw litter into the product.

Respiratory Protection: Where excessive misting occurs, reduce through ventilation.

Hand Protection: If at all possible, we recommend gloves made of a suitable plastic or other such material (NBR). Otherwise, use a suitable skin cream.

Eye Protection: In case of spraying danger, use tightly fitting goggles.

Bodily Protection: Wear oil resistant clothing in case of spraying danger. Preventative skin protection is necessary. After work clean and treat the skin.

**9. Physical and Chemical Properties**

- 9.1.1 Form** liquid
- 9.1.2 Colour** ASTM colour code: 1,0
- 9.1.3 Odour** typical
- 9.2 Flammability (solid, gaseous):** Not under normal conditions.
- 9.3 Ignition temperature:** > 300 °C DIN 51 794
- 9.4 Auto-ignition:** None
- 9.5 Explosion danger:** see 9.6, under strong heat and/or excessive misting only

<b>9.6 Explosion limits:</b>	Lower limit	0,6	Vol. %	
	Upper limit	6,5	Vol. %	
<b>9.7 Density at T = 15 °C:</b>		0,84-0,89	g/cm <sup>3</sup>	DIN 51 757
<b>9.81 Solubility in 20 °C water:</b>		practically insoluble		
<b>9.9 Viscosity (cinematic):</b>	T = 40 °C	16-71	mm <sup>2</sup> /s	DIN 51 562
	T = 100 °C		mm <sup>2</sup> /s	DIN 51 562
<b>9.10 Flash point:</b>		> 150	°C	ISO 2592
<b>9.11 Pour point:</b>		< -15	°C	ISO 3016
<b>9.12 Further Information:</b>	Vapour pressure	< 1	hPa	Literature

## 10. Stability and Reactivity

**10.1 Conditions to Avoid:** No decomposition occurs when handled according to proper procedures.

**10.2 Materials to Avoid:** Strong Oxidants. This material reacts slowly or not at all with most chemicals.

**10.3 Hazardous Decomposition Products:** None if stored and handled according to proper procedures.

**10.4 Additional Information:** Dangerous Reactions: None under proper handling conditions. Decomposition begins at higher temperatures.

## 11. Toxicological Information

### 11.1 Acute Toxicity

LD-/LC 50 Values relevant for classification:

Type:	Typical Value:	Species:	Method:	Source:
oral	> 2000 mg/kg	Rats	LD 50	Literature
dermal	> 2000 mg/kg	Rabbits	LD 50	Literature
inhalative	No Data available.			

Specific Symptoms in animal testing: No further data are available.

Primary Irritation:

on the skin	Slight irritation possible
on the eyes	Slight irritation possible
Sensitising	Not a sensitiser

### 11.2 Subacute/Chronic Toxicity

Long term research: No data available.

Experience with people: Repeated or long term skin contact can lead to removing skin fats or to dermatitis. Through this the skin can become sensitive to other materials or chemicals.

Additional toxicological information (especially for the mixture): This material is based on materials that have shown no carcinogenic effects in animal testing.

## 12. Ecological Information

**12.1 Persistence and Degradability:** Avoid seepage of this material into ground water, open water, the drainage or earth. This product is practically insoluble in water and only partially biodegradable.

**12.2 Mobility Product:** Product floats on water.

**12.3 Environmental Toxicity:** Aquatic Toxicity: Avoid seepage into open water, ground water or drainage. Behaviour in sewage-treatment plants: Can be mechanically removed from water.

**12.4 Additional Information:** According to the German water law "Wasserhaushaltsgesetz - WHG": WGK 1. When this material enters drinking water supplies, the drinking water supply is possibly endangered.

## 13. Disposal Considerations

**13.1 Product Recommendations:** Disposal or combustion should be performed with approved equipment. Give the used material to an approved waste disposal company. Material is free of PCB's and halogens.

German disposal laws: Abfallschlüssel EWC-Code 13 02 02 Nachweispflicht: yes

**13.2 Soiled packaging:** Recommendation: Empty packaging completely. Give to a certified company.

**14. Transport Information**

Not classified as hazardous for transport according to German law for national / international land transport (ADR/RID and GGVS/GGVE), inland shipping (ADN/ADNR), overseas shipping (IMDG-Code and GGVSee) and air transport (ICAO-TI and IATA-DGR).

**15. Regulatory Information****15.1 Characterization**

Identification letter and danger characterization of the product/ danger symbol: No characterization necessary

Danger determining component for labelling: None    R-sets: None    S-sets: None

Special characterization of specified mixtures according to the "Preparation Guidelines EU", Appendix II: None

**15.2 German Regulations**

Gefahrstoffverordnung: (statutory on dangerous substances) Not classified.  
(only when different from the EU category)

Beschäftigungsbeschränkung: (usability limits) No Limits.

Störfallverordnung: (statutory order on emergencies) Not listed in the appendixes.

VbF classification: (statutory order on flammable substances) Not classified.

Technische Anleitung Luft: (technical guidelines for air emissions) Class III - self-classified  
(least harmful category)

Wasserhaushaltsgesetz - WHG: (water endangering classification) Class 1 - self-classified  
according to VwVwS (slightly water endangering)

Berufsgenossenschaftliche/arbeitsrechtliche Vorschriften (industrial medicine regulations),  
e.g. arbeitsmedizinische Grundsätze und Arbeitsschutzvorschriften (VBG.ZH-1/Merkblätter  
u. a.): No MAK-figure stipulated (maximal workplace concentration)

Other regulations, restrictions and prohibitory directives: See 8.1

Inform yourself about and heed all relevant local regulations.

**16. Other Information**

This information is based upon the knowledge that we possessed at the time when this data sheet was written. The information contained herein is meant to describe the health and safety aspects of our product, and is not meant to guaranty certain product characteristics.

**This is a translation of the current "Sicherheitsdatenblatt according to 91/155/EWG" of the above mentioned product(s). The statements given in this document do not release the product(s) end user from observing strictly the regulations of local authorities.**