



# Multicor<sup>®</sup>

Anti-Corrosion Agents

# Multicor

## Anti-corrosion agents - long term protection with security

The high level of development of the products carrying the **Multicor** brand name, with high performance anti-corrosion agents that have proven their worth in actual use, is the result of decades of continuous R&D work. User-specific solutions profit from this accumulated experience.

Zeller+Gmelin has been certified to DIN EN ISO 9001:2008 and DIN EN ISO 14001:2005 and has implemented an unified concept to ensure the highest level of quality. This QM system makes possible the comprehensive networking of all quality requirements and ensures that you get products and services that you can rely on without any reservations. At the same time we offer consulting on site, regular laboratory monitoring for all products and help with questions concerning waste disposal.



### Multicor – anti-corrosion agents offer systematic protection

- **Multicor DW** dewatering fluids containing solvents for infiltrating and displacing watery media from metal surfaces, for example, after the washing installation or after machining workpieces with emulsions. Dewatering fluids develop very thin but highly efficient protective films for in-plant intermediate and packaging conservation. Normally degreasing is not necessary.
- **Multicor LH** corrosion protection products containing solvents develop protective films of varying consistencies (oily or waxy) and thicknesses and, due to the creep characteristics, can penetrate to even inaccessible parts etc. Degreasing is no problem, aqueous alkaline and even solvent cleaners can be used depending on the type of film.
- **Multicor LF** highly effective, solvent-free corrosion protection products for preserving ferrous and non-ferrous metals. Depending on the viscosity protective non-resinous films of differing thickness develop. Degreasing is no problem, aqueous alkaline and even solvent cleaners can be used depending on the type of film.
- **Multicor WM** water-miscible special-purpose product. The metastable character of the corrosion protection emulsion quickly develops a water-repellent, fast drying protective film.

The packaging and protective measures applied must match each other for either long term storage or export shipping.

We would be glad to recommend the right product for you to meet your own special requirements. Our highly qualified sales team would be at your disposal.

# Product overview

Product description	Prod.-No.	Flash point	Protection Type & thickness	Drying time approx. 20 °C (min)	Length internal storage (unpacked)	Length external storage (under cover)
<b>Dewatering fluids</b>						
<b>Multicor DW 2</b>	97760	40 °C	slightly oily 1-2 µm	30 - 45	4 - 6 months	2 - 3 months
<b>Multicor DW 2 Plus</b>	20770	44 °C	slightly oily 2-3 µm	30 - 45	5 - 8 months	3 - 6 months
<b>Multicor DW 3</b>	20960	62 °C	slightly oily 2-3 µm	30 - 60	4 - 6 months	2 - 3 months
<b>Multicor DW 3 Plus</b>	20900	82 °C	slightly oily 2-3 µm	60 - 120	5 - 8 months	3 - 6 months
<b>Multicor DW 3 Spezial Light</b>	97000	65 °C	slightly oily 0,5-1 µm	30 - 60	6 - 10 months	3 - 6 months
<b>Multicor DW 3 Extra Light</b>	90500	62 °C	waxy 2-3 µm	60 - 120	6 - 10 months	3 - 6 months
<b>Multicor DW 3 Ultra</b>	94080	62 °C	oily 3 µm	60 - 120	8 - 12 months	5 - 8 months
<b>Anti-corrosion oils</b>						
<b>Multicor LH 2</b>	08930	40 °C	waxy > 20 µm	30 - 45	> 24 months	12 - 18 months
<b>Multicor LH 2 Plus</b>	23210	> 40 °C	dry, grippy > 20 µm	30 - 45	> 24 months	12 - 18 months
<b>Multicor LH 3</b>	97120	68 °C	oily 3 µm	30 - 60	8 - 16 months	5 - 12 months
<b>Multicor LH 3 Plus</b>	05411	62 °C	dry, grippy > 20 µm	30 - 60	> 24 months	12 - 18 months
<b>Multicor LH 3 Extra</b>	24680	62 °C	oily 3-5 µm	30 - 60	8 - 16 months	5 - 12 months
<b>Divinol Multifluid</b>	22530	62 °C	slightly oily 2-3 µm	30 - 60	8 - 12 months	5 - 8 months
<b>Multicor LF 30</b>	81470	> 150 °C	oily 2-3 µm	n.a.	6 - 10 months	3 - 6 months
<b>Multicor LF 60</b>	81460	150 °C	very oily 5-10 µm	n.a.	8 - 12 months	5 - 8 months
<b>Multicor LF 65 FZ</b>	25470	> 180 °C	oily 3-5 µm	n.a.	8 - 12 months	5 - 8 months
<b>Multicor LF 65 Plus</b>	27370	> 180 °C	oily 3-5 µm	n.a.	12 - 16 months	8 - 12 months
<b>Multicor LF 80</b>	08900	> 150 °C	oily 10 - 20 µm	n.a.	12 - 24 months	8 - 16 months
<b>Multicor VCI 150</b>	57430	> 180 °C	–	n.a.	VCI-protection unlimited depending on close sealing of cavities	
<b>Greasy anti-corrosion agents</b>						
<b>Divinol Kettenfett</b>	21160	n.a.	grippy	n.a.	> 24 months	12 - 18 months
<b>Water-miscible anti-corrosion agents</b>						
<b>Multicor WM 105</b>	03620	n.a.	slightly sticky, depending on concentration	n.a.	depending on concentration	depending on concentration

The details for the expected length of protection are based on our experience and may differ according to the actual conditions and application.

Marine environ suitable	Degreasing aqueous -alkaline	Degreasing solvent -based	Description
	yes	yes	Dewatering fluid with very intensive water displacement capability for mass and small parts and for surface protective treatment of packed parts
yes	yes	yes	Dewatering fluid covers work pieces with a very thin film, high level of protection against corrosion, easy to remove
yes	yes	yes	Same applications as for DW2 Plus, but higher flash point and thus a some what longer drying time
	yes	yes	Light, easily sprayed dewatering fluid, high creep capability, e.g. for automatic ticket machines, signal units, door locks
	yes	yes	Dewatering fluid for wet mass and small parts. For intermediate storage within the company and for transport within central Europe
	yes	yes	Dewatering fluid with intensive water displacement capability, high level of protection against orrosion for wet mass and small parts
	yes	yes	Dewatering fluid with high corrosion protection for wet mass and small parts
yes		yes	High quality oil for long term protection against corrosion, also suitable for a marine or tropical climate, for external protection against corrosion for machines, etc..
yes		yes	For external storage of machines, etc., light, transparent film and excellent protection against corrosion
		yes	Oil for protection against corrosion during storage in protected rooms of unpacked metal sheets, plates, pipes, finished parts, etc.
yes		yes	High quality oil for long term protection against corrosion, also suitable for a marine or tropical climate, for external protection against corrosion for machines, etc
	yes	yes	Corrosion protection agent with lowest solvent share for internal storage of plates metal sheets, plates, pipes, finished parts, etc.
	yes	yes	Multipurpose oil that can be used as a maintenance fluid, lubricating oil and moisture displacer, also available in spray cans as Multispray
	yes	yes	Oil for protection against corrosion with components to neutralize sweat from the hands, to protect machines and tools, etc. during storage in protected rooms
	yes	yes	Anti-corrosion oil comparable to LF 30 but with higher viscosity
	yes	yes	Oil for temporary protection against corrosion for coated and uncoated grades of steel, primarily in rolling mills, will not run off
	yes	yes	Anti-corrosion oil comparable to LF 65 FZ but with higher corrosion protection
yes	yes	yes	High quality oil for long term protection against corrosion, also suitable for a marine or tropical climate, for external protection against corrosion for machines, etc  VCI-corrosion protection for cavities of gears, pumps, tubes, tanks, etc.
yes		yes	Greasy corrosion protection agent for hot conservation motorcycle-, bike- and transport chains
	yes	yes	Water-miscible agent for protection against corrosion, harmless to foodtuffs, with DVGW approval, can be used to protect pipe connecting parts made of cast iron or steel

# Degreasing with **Divinol**-Cleaning Agents

## Aqueous alkaline cleaners

Product name	Product description	Areas of application	Recommended application
<b>Divinol Spritzreiniger 1572</b>	Liquid neutral cleaner to clean and degrease metals by spraying, suitable for use in ultrasound cleaning units. Leaves a temporary anti-corrosion protective layer behind.	For iron, steel and aluminium	Temperature in spraying units: 30 - 70 °C. Dosing: 5 - 50 ml/l Time to take effect: 1-10 min.
<b>Divinol Spritzreiniger 1805</b>	Liquid alkaline cleaner to clean and degrease metals by spraying. Leaves a temporary anti-corrosion protective layer behind, strong cleaning action for dirt of all types.	For iron, steel and aluminium with caution	Temperature in spraying units: 40 - 80 °C. Dosing: 5 - 50 ml/l Time to take effect: 1-10 min.

Selection of the relevant spray cleaner depends on the material to be cleaned and the type of cleaning unit.

## Solvent based cleaners

Product name	Product description	Flash point	Recommended application
<b>Divinol Reiniger 73</b>	Universal solvent based cleaner to remove oil, dirt and baked-on deposits (evaporation number 100 / reference: ether = 1). Cleaner evaporates fully and leaves no residues.	> 55 °C	Application of the cleaner by a dipping process, paintbrush, ponge or brush. Then rinse off the parts with the cleaner.
<b>Divinol Reiniger 65</b>	Universal solvent based cleaner to remove oil, dirt and baked-on deposits. Medium proportion of solvent (evaporation number 65 / reference: ether = 1). Cleaner evaporates fully and leaves no residues.	58 °C	Application of the cleaner by a dipping process, paintbrush, ponge or brush. Then rinse off the parts with the cleaner.
<b>Divinol Reiniger 20</b>	Universal solvent based cleaner to remove oil, dirt and baked-on deposits. Rapid evaporation due to high proportion of solvent (evaporation number 20 / reference: ether = 1). Cleaner evaporates fully and leaves no residues.	28 °C	Application of the cleaner by a dipping process, paintbrush, ponge or brush. Then rinse off the parts with the cleaner.

Selection of the suitable solvent-based cleaner depends on the evaporation number and the flash point of the cleaner with respect to the relevant cleaning units.

It is necessary to comply with the currently applicable maximum permissible concentrations at the workplace for the industrial and commercial use of solvent-containing cleaners as per TRGS 900 [for Germany] (adequate ventilation and air extraction units).

## PROGRAM

### Industrial lubricants

Multiboard®	separation agents for derived timber products
Multical®	calibration lubricants
Multicast®	separation agents for metal
Multicor®	corrosion protection lubricants
Multicut®	non-water-miscible cooling lubricants
Multidraw®	wire drawing lubricants
Multidraw®	deep-drawing lubricants
Multipress®	extrusion oils
Multiroll®	lubricants for manufacturing continuous cast wire rod
Textol®	lubricants for the textile industry
Zubora®	water-miscible cooling lubricants
Divinol®	lubricating greases
Divinol®	guideway and slideway oils, hardening oils, adhesive oils, hydraulic oils, industrial gear oils, machine oils, commercial white oils, compressor oils, cylinder oils

You can find our products in over 100 countries world-wide .



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