



COOLING

THERMASOLV™ WB1

HEAT TRANSFER FLUID
BOILING POINT: 111°C/232°F
RENEWABLE PLANT BASED FLUID

BENEFITS

THERMASOLV WB1 is a renewable plant-based heat transfer fluid (1,3-propanediol and corrosion inhibitors), dedicated for industrial process chillers or direct plate or tube cooling systems.

It is a biodegradable fluid that meets OECD criteria extrapolated to a finished products, achieving 90% to 100% biodegradation within 28 days. With its chemical stability and lower viscosity, THERMASOLV WB1 offers an excellent alternative to traditional monopropylene glycol (MPG) fluids.

THERMASOLV WB1 exhibits excellent water stability and is formulated with safety in mind. It is non-toxic, non-flammable and has no flash point. The anti-corrosive H-OAT (neutralised carboxylic acids) formulation is nitrite and amine free.

This heat transfer fluid shows very good compatibility with all metals as well as a wide range of plastics & elastomers.

PERFORMANCE	- Excellent thermal conductivity and water stability - Excellent protection against freezing & deposition in the system - Lower viscosity than traditional MPG - Bacteriostatic (according to ISO11930) action avoids bacteriologic development which affects the flow & heat exchange in materials
COST	Concentrated product, ready to dilute in water, saving on transport & storage cost
HSE	- Low environmental impact: GREENWAY product - Nontoxic - Biodegradable according to the OECD. Biodegrades 90%-100% in 28 days - Based on renewable raw materials - Non-flammable & no flashpoint

SPECIFICATIONS

SPECIFICATIONS	VALUES	METHODS
Aspect	Green liquid	Visual
Density @ 20°C	1,053	AFNOR NF R 15-602-1 / ASTM D 1222

CHARACTERISTICS

CHARACTERISTICS	VALUES
Flash point	No
Boiling point @atmospheric pressure	111°C/232°F
Freezing point	-55°C/-67°F
Solubility in water	Total
Atmospheric lifetime (90%-100% biodegraded)	28 days
Kinematic Viscosity (cSt) @20°C	11.54
Specific Heat (kJ/Kg/K) @20°C	2.753
Thermal Conductivity (W/m·K) @20°C	0.320

PROCESS RECOMMENDATION

The best process will depend on factors such as operating conditions & equipment. Our team is ready to advise you.

We recommend preparing the THERMASOLV WB1 solution with DI water, at a minimum concentration of 40% by volume for optimum protection against corrosion before filling your installation.

The product can be used in the following processes:

- Direct to chip cooling, where the fluid flows through cold plates or tubes (only 1-phase)
- Industrial process chillers
- Specific manufacturing processes which need stable and uniform cooling

Kinematic viscosity of THERMASOLV WB1 (in cST)

CONCENTRATION AS A % OF VOLUME	40	50	60	70	80	90	100			
Temperature in °C	FREEZING ZONE									
-55								1810.02		
-50								1390.81		
-40								358.54	544.02	
-30								98.15	154.84	266.71
-20								27.48	35.44	47.94
-10	9.91	11.81	14.65	18.87	25.23	35.01	50.34			
0	6.21	7.76	9.69	12.08	15.03	18.67	23.17			
10	3.79	4.81	6.02	7.43	9.03	10.83	12.81			
20	2.45	3.04	3.84	4.94	6.45	8.56	11.54			
30	1.90	2.31	2.86	3.57	4.53	5.83	7.59			
40	1.49	1.78	2.15	2.65	3.32	4.24	5.49			
50	1.18	1.40	1.68	2.03	2.48	3.06	3.80			
60	0.94	1.12	1.34	1.62	1.96	2.40	2.95			
70	0.82	0.97	1.14	1.36	1.63	1.96	2.38			
80	0.67	0.77	0.89	1.06	1.27	1.56	1.94			
90	0.58	0.67	0.78	0.91	1.07	1.27	1.50			
100	0.49	0.56	0.64	0.74	0.88	1.07	1.33			

PACKAGING, STORAGE & SHELF LIFE

- Keep products in closed original packaging and store at room temperature.
- Shelf life is minimum 5 years from production date when kept in recommended conditions. The shelf life provides a guarantee of delivering new product and proper storage (no packaging leakages, no accidentally contamination). Once the product is used in a process it is designed for, there is no degradation of quality or performance over time.

AVAILABLE PACKAGING



12KG JERRYCAN

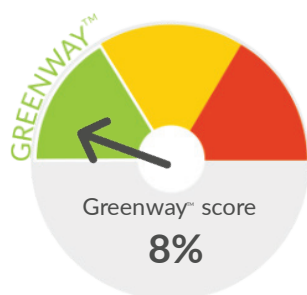


200KG DRUM

Please verify the packaging details, including volume and availability, with your sales representative, as they may vary depending on the production facility where the product is manufactured.

HEALTH, SAFETY & ENVIRONMENT

THERMASOLV WB1 is a **GREENWAY** product. More info on our Greenway concept via this [link](#).



MAIN CONTRIBUTORS WHICH REDUCE IMPACT:

HUMAN HEALTH & SAFETY

- Non-flammable, no flashpoint & no EUH risk phrases: 100% safe for storage and when used in equipment
- Non-toxic, no corrosive impact & no S risk phrases
- Contains vegetable based raw materials

ENVIRONMENT PROTECTION & RESOURCES SAVINGS

- No environmental hazard: no H labelling regarding environment
- Ultra-low GWP (1-30)

Contains no Reach Substances (on Candidate list, Annex XIV & XVII) / Contains no persistent organic pollutant (EC 850/2004) / Contains no Import/Export Hazardous substances (EU 649/ 2012)

In accordance with the Annex II of Directive 2011/65/UE (RoHS), including its amendments, we certify that this product does not contains quantities above 0.1% of Hg, Pb, Cr VI, PBB, PBDE, DEHP, BBP, DBP, DIBP and above 0.01% of Cd

Please refer always to the Safety Data Sheet (SDS or MSDS) prior to use. Our SDS can be downloaded at www.quickfds.com. We will request to provide your email address, so we can automatically send you a new version of the SDS when a future update would occur.

TECHNICAL SUPPORT & FREE-OF-CHARGE TESTING

Inventec has a worldwide dedicated Technical Support team to help you along the different stages of our cooperation.

Depending on your request, we provide online or onsite support

- to select the right product based on your specific needs
- to assist you in your product qualification process
- to guide you with the initial set up of you process at all your worldwide manufacturing facilities
- to provide fast response on technical issues which could occur at any time during mass production

Contact our technical support via contact@inventec.dehon.com or your local sales representative.

ABOUT INVENTEC

Inventec Performance Chemicals is a global provider of SOLDERING, CLEANING, COATING and COOLING materials for Electronic, Semiconductor and Industrial applications. For over 60 years we have shown leadership in innovation by putting HEALTH IMPACT, SUSTAINABILITY and RELIABILITY at the core of our product development. Inventec

With ISO 9001 & 14001 production sites in France, Switzerland, USA, Mexico, Malaysia and China we can guarantee a smooth and cost-effective supply chain.

We supply to many industries but the excellent performance of our products in applications which demand high reliability, leads us to focus especially on the AUTOMOTIVE, AEROSPACE, SEMICONDUCTOR, ENERGY and MEDICAL industry

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This data is based on information that the manufacturer believes to be reliable and offered in good faith. In no event will INVENTEC PERFORMANCE CHEMICALS be responsible for special, incidental and consequential damages. The user is responsible to the Administrative Authorities (regulations for the protection of the Environment) for the conformity of his installation.

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