PRODUCT DATA SHEET

NO-TOX® FOOD GRADE COOLANT CONCENTRATE

No-Tox Food Grade Coolant Concentrate, commonly known as No-Tox Coolant Concentrate, is the safe alternative to toxic and environmentally dangerous coolants. **No-Tox Food Grade Coolant** Concentrate is NSF HT1 registered and is safe for use in the "clean" industries such as food, beverage, pharmaceutical and personal care products. It contains a unique nitrite-free corrosion inhibitor that prevents rust and corrosion and buffers acids that may appear from oxidation. **No-Tox Food Grade Coolant Concentrate**'s heat transfer properties provide an excellent medium to efficiently cool equipment while maintaining a stable viscosity profile. **No-Tox Food Grade Coolant Concentrate** provides exceptional anti-rust and anti-corrosion properties to protect surfaces and machinery.

Applications

- Heat transfer fluid which can be widely used in the food, beverage, pharmaceutical industries for chilling and freezing products

Features and Benefits

♦ NSF HT1 registered	Use where incidental food contact may occur.
♦ Corrosion and rust protection	Protect
♦ Compliances	Kosher and Pareve approved. Halal certified.
♦ Excellent heat transfer	Cooling flexibility.
♦ Environmentally friendly	Favorable incident reporting.

General Description

No-Tox Food Grade Coolant Concentrate is innovative technology that gives the food, beverage or pharmaceutical processor new found security, safety and confidence by providing a secondary coolant medium. **No-Tox Food Grade Coolant Concentrate,** formulated with the highest quality ingredients, meets NSF HT1 and FDA requirements for materials that may have incidental contact with food as defined under Title 21 CFR, 178.3570. It is Kosher and Pareve approved, as well as Halal certified.

Product No. 301574

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TYPICAL PROPERTIES

Product No.	***301574***
Old Product No.	***62560***
Absolute Viscosity @ 0°C, cP	265.8
@ 20°C, cP	63.6
@ 40°C, cP	26.5
Boiling Point @ 760 mm Hg, °C (°F)	162.0 (324)
@ 50 mm Hg, °C (°F)	88.5 (191)
@ 10 mm Hg, °C (°F)	60.2 (140)
Vapor Pressure, @ 20°C (68°F), Pa (mm Hg)	88 (0.66)
Specific Heat, ASTM D2766 @ 20°C (68°F), J/g-K (BTU/lb-°F)	2.533 (0.605)
Thermal Conductivity, ASTM D2717 @ 20°C (68°F), watt/m-K (BTU/hr-ft-°F)	0.208 (0.120)
Freezing Point, °C (°F)	-54 (-65)
Refractive Index, nD^{20}	1.4304
Flash Point, ASTM D93 ºC (ºF)	101 (214)
Suspended Matter, Dirt, Lint and Foreign Particles	Substantially Free
Solubility with Water	Miscible in all proportions
Specific Gravity, ASTM D1298, 20/20ºC	1.041
Useful Temperature Range ºC	-50 to 120
(ºF)	-58 to 250
Appearance	Clear
Color	Water-white

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Typical Physical Properties of Diluted Solutions

Conc., wt%	Water, wt%	Freezing Point, ºC (ºF)	Specific Gravity	pH	Viscosity, cP	Boiling Point, ºC	Refractive Index, 20ºC
15	85	-5 (23)	1.0290	8.46	4.76 @-5°C	100	1.350
25	75	-10 (14)	1.0416	8.56	10.64 @-10°C	101	1.364
35	65	-15 (5)	1.0449	8.70	12.81 @-15°C	102	1.375
40	60	-20 (-4)	1.0595	8.74	43.99 @-20°C	103	1.380
45	55	-25 (-13)	1.0600	8.80	92.58 @-25°C	104	1.385
50	50	-30 (-22)	1.0743	8.86	189.31 @-30°C	104	1.390
53	47	-35 (-31)	1.0798	8.88	360.21 @-35°C	104	1.392
55	45	-40 (-40)	1.0857	8.88	743.35 @-40°C	105	1.395
57	43	-45 (-49)	1.0904	8.90	1403.13 @-45°C	105	1.397
60	40	-50 (-58)	1.0964	8.92	3232.76 @-50°C	107	1.402
70	30	-51 (-60)	--	8.98	--	110	1.411
80	20	-51 (-60)	--	9.06	--	119	1.420
90	10	-53 (-63)	--	9.16	--	138	1.402
100	0	-54 (-65)	1.0410	9.24	63.60 @20°C	162	1.430

Typical Thermal Properties of Diluted Solutions

Conc., wt%	Water, wt%	Specific Heat, BTU/lb-°F	Specific Heat, J/g-K	Therm. Con., BTU/hr-ft-°F	Therm. Con., watt/m-K
15	85	0.95038	3.97905	0.28243	0.48881
25	75	0.92807	3.88564	0.25627	0.44354
35	65	0.90885	3.80517	0.24783	0.42893
40	60	0.85745	3.58997	0.22426	0.38813
45	55	0.82533	3.45549	0.21125	0.36562
50	50	0.78990	3.30715	0.20156	0.34885
53	47	0.78425	3.28350	0.19591	0.33907
55	45	0.76545	3.20479	0.18948	0.32794
57	43	0.75712	3.16991	0.18251	0.31588
60	40	0.73742	3.08743	0.18067	0.31269

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