

Chemical Resistance List IM4500r

This issue supersedes the one dated: 20.09.2010

Table of contents

	Page
- Inorganic Compounds	1
- Acids	1
- Foods	1
- Organic Compounds	2
- Gasoline, Oil, Wax	2
- Refrigerants	3
- Resistance to gas	4
- Judgement criteria	4

Inorganic Compounds

	Judgement
Ammonia solution 25%	2
Ammonia solution 5%	1
Bilge water	1
Bromine	3
Distilled water	1
Hydrogen peroxide 30%	1
Ink	1
Iodine solution	1
Nickel acetate	1
Sea water	1
Soap	1
Sodium bromide	1
Sodium hydroxide solution 33%	2
Sodium hypochlorite	3
Sodium silicate	1
Sodium thiocyanate	1
Water	1

Acids

	Judgement
Formic acid from 10%	3
Formic acid up to 10%	2
Glutamic acid	1
Hydrochloric acid 10%	1
Hydrochloric acid, smoking, 36%	2
Nitric acid above 10%	3
Nitric acid up to 10%	2
Perchloric acid 60%	3
Phosphoric acid above 10%	3
Phosphoric acid up to 10%	2
Propionic acid	1
Saline solution	1
Sulphonitric Acid	3

Foods

	Judgement
Coca cola	1
Fruit juice	1
Grape juice	1
Juice	1
Lemon juice	1
Orange juice	1

Acids

	Judgement
Acetic acid above 10%	3
Acetic acid anhydrite	3
Acetic acid up to 10%	1
Acrylic acid	2
Boric Acid	1
Butyric acid	1

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Foods

	Judgement
Tooth paste	1
Vitamins	1
Whey	1
Whisky	1
Wine	1

Organic Compounds

	Judgement
2-Ethylhexyldiphenylphosphate	1
1,1,1,2 Tetrafluorethane	1
Acetone	1
Adhesive	1
Antifreeze type D	1
Benzaldehyde	1
Benzoic acid	1
Brake fluid ATE SL DOT4	2
Butanol	1
Chlorinated hydrocarbons	1
Coolant 25 R	1
Cyclohexane	1
Di-2-ethylhexylphenylphosphate	1
Diallylphthalic	1
Dimethyl formamide	3
Dioxane	2
Ethanol	2
Ethyl acetate	3
Fat alcohols	1
Formaldehyde	1
Gas condensate	1
Glue	1
Glycerine	1
Heptane	1
Hexane	1
Isooctane	1
Isopropanol	1
Latex	1

Organic Compounds

	Judgement
Melamin resin	1
Methane	1
Methanol	1
Methylene chloride	3
Methylisobutylketon	1
Panoline	1
PCB-substitutes	1
Penta-erythritol-ester	1
Perfume	1
Phenol	1
Phosphate esters	1
Polyester resins	1
Propanol	2
Propylene glycols	2
Screw saving glue	1
Styrene	1
Tar	1
tert.-Butyl-2-hexanoat	1
tert.-Butylmethylether	1
Tetrachlorethylene	1
Tetrahydrofurane	3
Toluene	1
Tributylphosphate 79%, 2,9% Cycloaliphatic Epoxydes, 21% Additives	1
Trichlorethylene	1
Trichloroethane	1
Triethyleneglycol	2
Triphenylphosphate	1
Xylene	1

Gasoline / Oil / Wax

	Judgement
ATF Dexron VI	1
Biologic fuel	1
Chevron Hyjet IV-A	1
Diesel	1
Essential oils	1
Fuel oil	1
Gear oil	1

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Gasoline / Oil / Wax

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Hydraulic oil	1
Kern oil	1
Mineral oil	1
Normal benzene unleaded EN228	1
Oil	1
Oil of bitter almond	1
Palm Oil	1
Paraffin oil	1
Rapeoilmethylester	1
Refrigerator Oil BSE 32	1
Refrigerator Oil BSE 55	1
Refrigerator Oil Bitzer Oil Type 5.2	1
Skydrol MCS-2361	1
Skyrol B500-4	1
Spirits of turpentine	1
Super benzene leaded DIN 51600	1
Super benzene unleaded EN228	1
Wax	1

Refrigerants

	Judgement
R115 Chloropentafluoroethane	1
R116 Hexafluoroethane	1
R123 C ₂ HCl ₂ F ₃	1
R124 1-Chloro-1,2,2,2-tetrafluoroethane	1
R125 Pentafluoroethane	1
R133A 1-Chloro-2,2,2-trifluoroethane	1
R134A Tetrafluoroethane	1
R142B 1-Chloro-1,1-difluoroethane	1
R143A 1,1,1-Trifluoroethane	1
R152A 1,1-Difluoroethane	1
R161 Ethylfluoride	1
R170 C ₂ H ₆	1
R218 Octafluoropropane	1
R227 Heptafluoropropane	1
R290 Propane	1
RC318 Octafluorocyclobutane	1
R401A CHClF ₃ 53%	1
C ₂ H ₄ F ₄ 13%	
R402A CHClF ₂ (R22) 38%	1
C ₂ HF ₅ (R125) 60%	
C ₃ H ₈ (R290) 2%	
R403B Mixture	1
R404A C ₂ HF ₅ 44%	
F ₂ CH-CF ₃ 4%	1
H ₃ C-CF ₃ 52%	
R407C CH ₂ F ₂ (R32) 23%	
F ₂ HC-CF ₃ (R125) 25%	1
FH ₂ C-CF ₃ 53%	
R408A CH ₂ F ₂ 45-49%	
C ₂ HF ₅ 5-9%	1
H ₃ C-CF ₃ 45-47%	
R409A CH ₂ F ₂ 58-62%	
CHClF-CF ₃ 23-27%	1
H ₃ C-CClF ₂ 14-16%	
R410A Mixture	1
R413A Mixture	1

Refrigerants

	Judgement
R11 Trichlorofluoromethane	1
R12 Dichlorodifluoromethane	1
R12B1 Bromchlorodifluoromethane	1
R13 Trifluorochloromethane	1
R13B1 Bromtrifluoromethane	1
R14 Tetrafluoromethane	1
R21 Dichloromonofluoromethane	1
R22 Chlorodifluoromethane	1
R23 Trifluoromethane	1
R32 Difluoromethane	1
R40 Chloromethane	1
R40B1 Bromomethane	1
R41 Methylfluoride	1
R114 1,2-Dichloro-1,1,2,2-tetrafluoroethane	1

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Refrigerants

		Judgement
R500	Dichlorodifluoromethane and 1,1- Difluoroethane, azeotropes Mixture with ≈ 74 % Dichlorodifluoromethane	1
R502	Chlorodifluoromethane and Chloropentafluoroethane, Mixture with a constant evaporation point, with ≈ 49 % Chlorodifluoromethane	1
R503	Chlorotrifluoromethane and Trifluoromethane, azeotropic Mixture, with ≈ 60 % Chlorotrifluoromethane	1
R507	C ₂ HF ₅ 50% CH ₃ -CF ₃ 50%	1
R600	n-Butane	1
R600A	Iso-Butane	1
R717	Ammonia	1
R1132A	1,1-Difluoroethylene	1
R1150	C ₂ H ₄	1
R1216	Hexafluoropropylene	1
R1270	C ₃ H ₆	1
R1318	Octafluorobut-2-ene	1
HFC245	1,1,1,3,3 Pentafluoropropan	1

Resistance to gas

	Judgement
Ethane	1
Ethylene	1
Helium	1
Hydrogen	1
Hydrogen bromide	2
Hydrogen chloride	3
Hydrogen sulfide	1
Methane	1
Natural gas	1
Nitrogen	1
Ozone (150g/m ³)	1
Propane	1
Propylene	1
Sulphur dioxide	1
Water steam	1

Resistance to gas

	Judgement
Acetylene	1
Air	1
Argon	1
Butane	1
Carbon dioxide	1
Carbon monoxide	1
Chlorine	3

Judgement criteria

1	very good resistance
2	good to satisfying resistance
3	bad resistance