

PRODUCT LOADING COMPATIBILITIES

Effective date : 30/06/11

Revision	Date	Object	
18	7/06/11	1) New products : D0, Isanes IP 100 / 120 / 140 / 200, Spridane L2, EDC Diamond, Lubrilam S 41L et S 61L. 2) Update of the compatibility : Loading of Isane forbidden after acetate.	
17	10/11/10	1) Update of the compatibility chart : creation of the gas-oil D0 column. Modification of the fluxing product column. 2) UN code deleted from the Total Fluids product list	
16	07/06/10	1) Creation of a new compatibility chart for different grades of plaxolene (Chapter IX) 2) Update of the compatibility chart : creation of the Toluene TDI and Plaxolene columns and Toluene TDI line 3) Update of the product list : phytosanitaires (Chapter VII)	
	Name	Title	Signature
Written by	E.THOMASSET	Quality and Safety Manager	
Checked by	S. LAMRANI KERN J. JACOB	Technical Support Manager Oudalle Quality and Environment Manager	
Approved by	JF. BAUX F. DALEMAT	HSEQDD Manager Production Manager	

I) PURPOSE

This document presents the measures recommended by TOTAL FLUIDS to avoid incompatibilities, pollution or safety risks when loading products marketed by TOTAL FLUIDS and TOTAL subsidiaries.

It should be regarded by carriers as a set of best practices recommended to supply chain operators. Their responsibilities and obligations are namely to unload products in the same state as they were in when entrusted by the SPECIAL FLUIDS entity, without any alteration or contamination.

II) RESPONSIBILITIES

In all cases, the carrier shall be solely responsible for the proper conservation of the product entrusted thereto. This document shall not place any responsibility on TOTAL FLUIDS in this field.

III) FIELD

As there is no particular procedure specific to any loading site, no cleanliness check upon loading, no vacuity check and no compatibility check of road or rail tankers and containers is carried out. However random checks will always be realized to verify that the vehicles of transport and their equipments correspond technically to the respective safety instructions.

For the loading of containers chartered by Total Fluids, the following special washing procedure must be requested:

- specific washing by TSN depending on the type of product previously loaded,
- valve disassembly and cleaning,
- change of seals,
- final cleanliness check.

Any specificities of a given site are indicated in the regularly updated and distributed "Loading book". Such specificities are usually indicated for safety reasons. Each site shall have full authority in this respect.

This document does not apply to ship loading, for which the washing processes are adapted to the products loaded beforehand and the final cleanliness of which is checked by a third party.

IV) EXTERNAL COMMUNICATION

This document is distributed to the carriers chartered by TOTAL FLUIDS and to customers and affiliates collecting loads.

The original version of this document is in French and has been translated into German and English. In the event of any discrepancy between the different versions, the French version shall prevail.

V) USING THE DOCUMENT

When a tanker is allocated to a transport order, the dispatcher must, if he wishes to use this support document, chronologically perform the following operations:

1. Make sure the tanker has not carried one of the products mentioned in the "Other Products" table (page 7, **chapter VIII**)
2. Classify the TOTAL FLUIDS product in a generic category using the "List of TOTAL FLUIDS products", **chapter VII**.
3. Use the compatibility table, **chapter VI**.
4. If in doubt, use the decision flowchart on the last page,
5. As a last resort, contact the instructing party for further advice.

VI) COMPATIBILITY CHART

Tankers loading the same product as the product previously carried simply need to be emptied and drained.

TOTAL FLUIDS PRODUCT TO BE LOADED (refer to appendix: list of TOTAL FLUIDS products)	→														PRODUCT PREVIOUSLY LOADED (refer to appendix: "Non TOTAL FLUIDS Products – comments")	↓													
	SPECIAL BOILING-POINT SPIRITS	METHYLCYCLOHEXANE	WHITE SPIRITS Class HT	WHITE SPIRITS Class TBT	KEROSENES Class TBT	ISOPARAFFINS	ARomatics except TOLUENE, XYLENE	TOLUENE and XYLENE, except TDI	TOLUENE TDI	MARINE DISPERSANTS	TBT GAS-OILS	PLAXENE and BASE OIL	FLUXING PRODUCTS	GEMSEALS		KERDANE D +, KERDANE D 75 et D 75 SP	KERDANE IP et KERDANE SP	PLAXOLENES	GAS –OIL D0										
Maximum temperature of the tank before loading (°C)	30	30	30	30	30	30	30	30	30	30	-	-	-	30	30	-	-	30											
ACETATES	L	L	L	L	L	I	L	L	L	L	L	L	E	L	L	L	L	L											
AROMATICS except TOLUENE and XYLENE	L	L	E	L	L	L	E	L	L	L	L	L	E	L	L	L	L	L											
OTHERS	Refer to appendix: "Other Products"																												
Unleaded FUELS	L	L	L	L	L	L	L	L	L	L	L	L	E	L	L	L	L	L											
ESSENCES SPECIALES and METHYLCYCLOHEXANE	O	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L											
ETHANOL and METHANOL	L	L	L	L	L	L	L	L	L	L	L	L	E	L	L	L	L	L											
HT and BT GAS-OILS	L	L	L	L	L	L	O	L	L	O	L	L	E	L	O	L	L	O											
TBT GAS-OILS, GREENFLUX SD	L	L	L	L	O	L	O	L	L	O	L	E	O	O	O	L	O	O											
ISOPARAFFINS	L	L	O	O	O	O	O	L	L	O	O	L	E	O	O	O	L	O											
HT and BT KEROSENES	L	L	O	L	L	L	O	L	L	O	L	L	E	L	O	L	L	O											
KEROSENES TBT and GREENFLUX 2000	L	L	O	O	O	L	O	L	L	O	O	L	E	O	O	O	L	O											
MARINE DISPERSANTS	L	L	L	L	L	L	L	L	L	L	L	L	E	L	L	L	L	L											
PLAXENES and BASE OILS	L	L	L	L	L	L	L	L	L	L	L	O	E	L	L	L	O	L											
TOLUENE and XYLENE, except TDI	L	L	O	L	L	L	O	O	L	L	L	L	E	L	L	L	L	L											
TOLUENE TDI	L	L	O	L	L	L	O	O	L	L	L	L	E	L	L	L	L	L											
TBT WHITE SPIRITS	L	L	O	O	O	L	O	L	L	L	L	L	E	L	O	O	L	L											
HT and BT WHITE SPIRITS	L	L	O	L	L	L	O	L	L	L	L	L	E	L	O	L	L	L											
HEATING FLUIDS	L	L	O	O	O	L	O	L	L	O	O	L	E	L	O	O	L	O											
GEMSEALS	L	L	L	L	O	L	O	L	L	O	O	L	E	O	O	O	L	O											

L	Washing, drying, odorless (presentation of washing report *)
O	Empty and drained, odorless, without any trace of product (presentation of the log book *)
E	Empty and drained, without any trace of product (presentation of the log book *)
O	Empty and drained, without any trace of product. Documented draining procedure carried out by a washing company authorized by Total Fluids.
I	Forbidden

* random checks by the sites of load, cf page 2)

VII) List of TOTAL FLUIDS products - page 1

This list classifies and identifies our products in relation to a generic name commonly used in the market. This gives an essential key to use the chart above which only works with generic names.

	SBP SPIRITS	HT WHITE SPIRIT	TBT WHITE SPIRIT	TBT KEROSENE	ISOPARAFFIN	AROMATICS	GASOILS TBT	GEMSEALS	PLAXOLENE	PLAXENE & BASE OILS	FLUXING PRODUCTS	HEATING FLUIDS	MARINE DISPERSANTS
ARB'HIVER													
ARBOFINE													
BANOLE													
BANOLE EC													
BANOLE HV													
BANOLE W													
BURNING KEROSENE													
CATANE													
CITROLE													
EOLANE 100													
EOLANE 130													
EOLANE 160													
EOLANE 90													
EDC 95-11													
EDC 99-DW													
EDC Diamond													
EDC PEARL													
FINASOL OSR 51													
FINASOL OSR 52													
FINASOL OSR 61													
FINASOL OSR 62													
FINAVESTAN EMA													
FINAVESTAN TS													
FLUID 8930													
FLUID 8940													
FLUID 8980													
GEMSEAL 25													
GEMSEAL 40													
GEMSEAL 60													
GEMSEAL 120													
GENERA 12													
GENERA 9													
GENERA 6													
GREENFLUX 2000													
GREENFLUX SD													
HERBIDOWN													
HERBIPLUS													

List of TOTAL FLUIDS products - page 2

	SBP SPIRITS	HT WHITE SPIRIT	TBT WHITE SPIRIT	TBT KEROSENE	ISOPARAFFIN	AROMATICS	GASOILS TBT	GEMSEALS	PLAXOLENE	PLAXENE& BASE OILS	FLUXING PRODUCTS	HEATING FLUIDS	MARINE DISPERSANTS
HYDROSEAL G 232 H													
HYDROSEAL G 240 H													
HYDROSEAL G 250 H													
HYDROSEAL G 260 H													
HYDROSEAL G 270 H													
HYDROSEAL G 290 H													
HYDROSEAL G 3 H													
HYDROSEAL G 300 H													
HYDROSEAL G 310 H													
HYDROSEAL G 315 H													
HYDROSEAL G 340 H													
HYDROSEAL G 400 H													
ISANE IP 100													
ISANE IP 120													
ISANE IP 140													
ISANE IP 155													
ISANE IP 175													
ISANE IP 185													
ISANE IP 200													
KERDANE													
KERDANE D 75													
KERDANE D +													
KERDANE IP													
KERDANE SENTEUR PLUS													
KEROIL													
KETRUL 211													
KETRUL 220													
KETRUL D 100													
KETRUL D 70													
KETRUL D 75													
KETRUL D 80													
KETRUL D 85													
LUBRILAM S 22 L													
LUBRILAM S 23 L													
LUBRILAM S 30 L													
LUBRILAM S 40 L													
LUBRILAM S 41 L													
LUBRILAM S 50 L													
LUBRILAM S 54 L													
LUBRILAM S 60 L													
LUBRILAM S 61 L													
ORTHO-XYLENE													
OVISPRAY													
PLAXENE 1100													
PLAXENE 185													
PLAXENE 25110													
PLAXENE 5100													

List of TOTAL FLUIDS products - page 3

	ESSENCE SPECIALE	WHITE SPIRIT HT	WHITE SPIRIT TBT	KEROSENE TBT	ISOPARAFFINE	AROMATIQUES	GAZOLE TBT	GEMSEALS	PLAXOLENE	PLAXENE ET HUILE DE BASE	FLUXANTS	FLUIDE DE CHAUFFAGE	DISPERSANTS MARINS
PLAXENE 6110													
PLAXOLENE 25													
PLAXOLENE 40													
PLAXOLENE 50													
PLAXOLENE 50 SRD													
SCRIPTANE NW 40													
SCRIPTANE NW 50													
SCRIPTANE NW 50 SRD													
SCRIPTANE PW 24/27 H													
SCRIPTANE PW 25/28 H													
SCRIPTANE PW 26/29 H													
SCRIPTANE PW 28/32 H													
SCRIPTANE PW 30/35 H													
SOLANE 100/120													
SOLANE 100/140													
SOLANE 100/155													
SOLANE 60/95													
SOLANE 70/95													
SOLANE 80/110													
SOLANE CYCLOHEXANE													
SOLANE CYCLOPENTANE													
SOLANE HEPTANE													
SOLANE HEXANE 36													
SOLANE HEXANE 45													
SOLANE ISOHEXANE													
SOLANE METHYLCYCLOHEXANE													
SOLANE PENTANE 15													
SOLANE PENTANE 22													
SOLVAREX 10													
SOLVAREX 10 LN													
SOLVAREX 9													
SOLVIR													
SPIRDANE D 25													
SPIRDANE D 30													
SPIRDANE D 40													
SPIRDANE D 60													
SPIRDANE D 60 L													
SPIRDANE HT													
SPIRDANE L1													
SPIRDANE L2													
TOLUENE													
TOLUENE TDI													
VELEZIA													
XYLENE ASTM													

The HT reference concerns White Spirits, Kerosenes and Gas-Oils with an aromatic content >10%
 The TBT reference concerns White Spirits, Kerosenes and Gas-Oils with an aromatic content <1%

VIII) OTHER PRODUCTS
INCOMPATIBLE EVEN AFTER WASHING

NAME	OTHER NAME	OBSERVATIONS
ACRYLATE BENZENE BITUMENS LIQUID CHALK CREZOLE WASTE LUB EXTRACTS TARS EDIBLE FATS DRAINED OILS MOLASSES MERCAPTANS PARRAFINS, WAXES (except emulsions) RESINS (except emulsified resins) SILICONES	Plaxolene Thiochemicals	Forbidden by French Decree ADR 2001 chap. 2 art. 5

The products listed above are considered impossible to wash correctly, whatever the washing techniques used, and as a consequence are likely to pollute the following product, to leave an unacceptable odour or to be dangerous for loading operations.

IX) PLAXOLENE COMPATIBILITY CHART

Plaxolene to be loaded \Rightarrow	Plaxolene (25,40, 50)	Plaxolene MS	Plaxolene TDAE
Previous plaxolene loaded \Downarrow			
Plaxolene (25,40, 50)	O	L	L
Plaxolene MS	O	O	O
Plaxolene TDAE	O	O	O

X) OTHER PRODUCTS FLOWCHART

PRODUCT PREVIOUSLY DELIVERED

