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TIER CLASSIC TECHNICAL DATA SHEET

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Document layout	3
Material composition	5
Physical properties	6
Mechanical properties	6
Thermal properties	7
Fire reaction properties	7
Static electrical properties	8
Artificial weathering	8
Surface properties	8
Disclaimer and copyright	10
Appendix A – Document citations	11
Appendix B – Chemical compatibility	13
Appendix C – ISO 10874/ EN685 Classifications	19



TIER Classic Indoor Flooring

Product name	TIER Classic
Product application	Indoor Flooring
Material	SPC (Stone Polymer Composite) flooring
Material description	SPC flooring consists of a core made from a blend of PVC (Polyvinyl chloride) and minerals, accompanied by a PE (Polyethylene) wear layer. Depending on the TIER specification, it may also include an IXPE layer.

Document layout

Eva-Last strives to evaluate their products in depth and present the technical and safety information available in a manner that assists with the application thereof. If additional data or information is required, please do not hesitate to contact us at rad@eva-last.com.

In an attempt to simplify the information, similar data is loosely grouped into the categories summarised below. This document is ordered according to these categories and the applicable page number for the start of each section is captured in the table of contents.

- Material composition
- Physical properties
- Mechanical properties
- Thermal properties
- Fire reaction properties
- Weathering properties
- Surface properties

The material compositions section captures a summary of the product make-up from the Material Safety Data Sheet (MSDS). A link to the MSDS is provided for additional detail. Summaries of chemical compliance data available are also collected in this section.

The Physical properties section provides a summary of available profiles and general material properties such as density, water absorption, etc. Additional profile information can be obtained from drawings in the appropriate appendix. Where possible, material properties that can be assigned to more specific categories are moved to the relevant sections.

The Mechanical properties section captures data related to the product’s reaction to various load conditions. The section is broadly assembled into the below categories. Additional profile and sectional information are Captured by the drawings in the appropriate appendix.

- Material specific mechanical properties
- Profile specific mechanical properties
- Sectional properties



Product properties such as the expansion coefficient, thermal resistance, etc. are captured, where applicable, in the Thermal properties section.

Information regarding the product's reaction to fire is captured in the Fire reaction properties section.

Test data relating to the acoustic performance of the product, where applicable, is summarised in the acoustic properties section.

Information on the product's resistance to mold, termites, etc. is collected in the Biodegradation properties section.

The Surface properties section summarises information regarding the finish or texture of the product. Test data on aspects such as slip resistance (where applicable) is included in this section.

Where the products form part of a system and, as a result, utilise other components, an additional section to capture useful data regarding these components is added to the document.

Where information is not yet available, the section is simply omitted. In the cases where information can be substituted or supplemented with alternative data (based on similar compositions, etc.), an attempt to do so is made. Where this is the case, it is highlighted. Please make use of the data accordingly. Links to relevant reports can be found in **Appendix A**. For any additional information regarding this, please feel free to contact rad@eva-last.com.

Always ensure the product, and application thereof is suitable, rational, and compliant with any applicable regulations or standards. Wherever necessary, consult a suitably qualified professional. For information about the installation and use of the product, please see the applicable Installation Guide (IG). For additional material safety and handling information, please refer to the applicable MSDS. For any further information, please contact rad@eva-last.com.



Material composition

The table below provides a simplified breakdown of the TIER material technology composition. For a more comprehensive understanding of the material's composition, safety guidelines, and handling instructions, please refer to the TIER MSDS. To determine substance compatibility or incompatibility with the product, consult the Surface Properties section and **Appendix B**.

Component	Substance	Mass (%)
Core	Calcium Carbonate	72.0
	Polyvinyl chloride	25.0
Wear layers	Polyethylene	0.45 to 2.0
	Additives	0.2 to 1.75
Additional additives		0.8

Material compliance

TIER has been assessed to determine whether it contains Substances of Very High Concern (SVHC) that may be classified as carcinogenic, mutagenic, or toxic to reproduction of humans or animals, or have a persistent, cumulative, or negative impact on the environment in accordance with European REACH (Registration, evaluation, and authorization of chemicals) regulations.

Compliance report	Result	Issue date	Compliance body	Information
SVHC	Pass	2019-08	EU REACH	Of the 205 substances evaluated, non-have been detected. SVHC concentration require detection levels of less than 0.05% of the whole product.

Volatile organic compounds (VOCs)

TIER's volatile organic compounds (VOCs) were assessed by placing samples in an emissions test chamber for several days. An air sample collected from the chamber was then analysed using Gas Chromatography and Mass Spectrometry.

Compliance report	Emissions class	Information
ISO 16000 (French VOC Emissions class)	A+	Tests were conducted on 1,220 mm x 181 mm x 3.8 mm samples with a 0.3 mm wear layer and IXPE layer. Compounds evaluated included Formaldehyde, Acetaldehyde, Toluene, Tetrachloroethylene, Xylene, and more. Concentrations were assessed against limits defined by the standard to classify emissions.



Physical properties

Profile properties

Below is a summarized table of the Classic TIER profiles. The categorisation is determined by the poorest-performing trait observed in the tested profile, aligning with EU regulations. See **Appendix C** for classification details.

Profile ID	Core (mm)	Wear layer (mm)	Underlay (mm)	Total thickness (mm)	Width (mm)	Length (mm)	Class
Classic range 	4.00	0.30	None	4.3	181	1 220	31 Moderate commercial application
Classic range commercial 	5.50	0.50	1.0	7.0	181	1 220	33 Heavy commercial application

Mechanical properties

The provided properties offer insights into TIER profiles achieved with a 3.8 mm core, as demonstrated through external testing. This data is assumed to be a good indication of the anticipated performance for the indicated wear layer thicknesses with core thicknesses of 4.0 mm and 5.5 mm.

0.3 mm Wear layer with 3.8 mm core

The following table outlines tests, both external and internal, conducted to evaluate profile surface performance under different loads. Tests were done on profiles with a 0.3 mm coating and a 3.8 mm core.

Properties	Result	Requirements	Test method	Class	Information
Abrasion and wear resistance	Pass	More than 1 500 Cycles	EN 15468	Class 31	Based on internal testing. Classified for Heavy domestic and moderate commercial application
Delamination	Pass	No delamination	ISO 4918: 2016 Castor chair test (25 000 rotations)	Class 33	Based on External testing. Upon inspection of the board's surface there is no presence of delamination, surface damage, or discernible microcracks (crazing). Furthermore, the joints between the boards have remained unaffected, exhibiting no signs of opening or compromise. This assessment remains consistent even after subjecting the board to an extensive trial of 25 000 rotations, with a 90 kg weight positioned on caster wheels affixed to a rotating platform.
Surface damage		No damage			
Crazing		No crazing (Microcracking)			
Opening of joints	Pass	No opening			
Maximum joint opening	0.02 mm	No requirements			
Maximum height difference between profiles	0.06 mm				



0.5 mm Wear layer with 3.8 mm core

The table below outlines external tests conducted to assess the internal flooring use classification by testing the SPC533 profile. The tests were carried out on profiles with a 0.5 mm coating thickness and a 3.8 mm core thickness.

Properties	Result	Requirement	Test method	Class
Wear resistance (Method A)	Pass	More than 2 000 cycles	EN 13329	Class 33
Wear resistance (Method B)	Pass	More than 5 000 cycled	EN 15468	
Impact resistance (Big ball)	1 600 mm	Drop height greater or equal to 1 600 mm	EN 13329	
Micro-scratch resistance	-23%	MSR-A2 Between 10 to 30% change in gloss	EN 16094	
Castor chair resistance	Pass	More than 25 000 cycles	EN 425	
Effect of furniture leg	Pass	No visible damage	EN 424 (Foot type 0)	
Residual indentation	0.01 mm	0.2 mm	ISO 24343-1	
Swelling	0.15%	Less than 18%	ISO 24336	
Locking strength (Long side)	4.4 kN/m	1.0 kN/m	ISO 24334	
Locking strength (Short side)	4.1 kN/m	1.5 kN/m		

Thermal properties

The table below outlines typical thermal properties of the TIER Classic material.

Properties	Results	Test method	Information
Coefficient of thermal expansion (CTE)	70 x 10 ⁻⁶ mm/mm.°C	N/A	This has been assumed based on the base material of PVC.
Dimensional stability due to variation of temperature at 80°C	Average Width	0.09%	Profiles were subjected to 80°C temperatures for 6 hours before reconditioning at 23°C for 24 hours, before measuring final length and curling.
	Average Length	0.02%	
	Average Curling	0.03 mm	

Fire reaction properties

The table below provides fire reaction properties of TIER materials with a 3.8 mm core, 0.3 mm wear layer, and a bottom IXPE layer. These properties offer insights into the expected behaviour of the Classic range. Further testing is underway for specific Classic profiles without the IXPE layer.

Standard	Properties	Result	Requirement	Class	Test Method	Information
EN 13501	Smoke production	321.6%.min	Less than 750%.min	B _{fl} -S1	EN 9239 and ISO 11925	Tests were conducted on specimens measuring 1,220 mm x 181 mm x 3.8 mm, featuring a 0.3 mm wear layer and IXPE layer. These tests were carried out in accordance with the specified methods to determine the properties required for assigning a fire reaction class.
	Flame spread (Fs)	190 mm after 10 min	Less than 150 mm in 20 seconds.			
	Critical heat flux	9.3 kW/m ²	Greater than 3.0 kW/m ²			
	Heat flux (HF)	9.3 kW/m ² in 10 min				
	Maximum light attenuation	57.9%				
	Formaldehyde emissions	0.005 mg/m ³	Less than 0.123 mg/m ³	E1	EN 13986	



Static electrical properties

The table below presents static electrical properties of TIER materials.

Properties	Result	Requirement	Test method	Class
Body voltage	0.4 kV	Less than 2 kV	EN 1815: 2016 Method A	Pass

Artificial Weathering

Numerous textiles and inks have the potential to undergo colour appearance alterations when subjected to prolonged exposure to direct sunlight. To assess this phenomenon, the ISO 105 B02 standard is employed. This standard involves subjecting samples to an artificial light source under controlled environmental conditions. Colourfastness is subsequently evaluated by comparing the samples' colour grades to a reference sample under standardized lighting conditions.

Properties	Result	Requirement	Test method	Class
Colour fastness	Grade 6	Grade 6	EN ISO 105 B02	Pass

Surface properties

Slip resistance

Slip resistance refers to a surfaces ability to prevent people from slipping or losing their footing. There are various methods used to measure slip resistance. These tests provide a measurement of slip resistance that can be used to compare different flooring materials. Slip resistance is influenced by factors such as the material and its surface, the angle of incline, the type of shoe being worn, and the presence of moisture or multiple contaminants.

TIER slip resistance results

The following table provides slip resistance results for TIER surface materials by external laboratory.

Finish	Result	Class	Requirement	Test method	Information
Dynamic coefficient of friction (0.3 mm wear layer)	0.37	DS	Greater than 0.30	EN 13893	Tests were performed on specimens sized at 1,220 mm x 181 mm x 3.8 mm, with a 0.3 mm wear layer and IXPE layer, under dry conditions.
Oil wet ramp test (0.5 mm wear layer)	10.6°	R10	10° to 19 °	DIN 51130:2014	Tests were performed on specimens sized at 1,220 mm x 181 mm x 6.0 mm, with a 0.5 mm wear layer and IXPE layer, under wet and oily conditions.



Stain resistance

The TIER wear layer material can be affected by various substances. The following list of substances and solutions has been tested on TIER floorings surface for the duration listed. To ensure the longevity of the product, it is crucial to verify material compatibility when selecting chemicals that may encounter it and to clean these substances off the floor as soon as possible.

Staining agent	Duration of contact	Results of visual changes	Test method	Note
Water	10 min	5 (Rating range of 1 to 5)	EN 438-2:2016 26	No change was observed in the wear layer's surface following cleaning. The test area is visually identical to the surrounding areas after cleaning.
Acetone	10 min			
Cleaning solution	10 min			
Coffee (Approx. 80°C)	16 Hours			
Sodium hydroxide (25% solution)	10 min			
Hydrogen peroxide (30% solution)	10 min			
Carbon black suspension in paraffin oil	10 min			

Staining agent	Duration of contact	Results of visual changes	Test method	Note
Sodium hydroxide (40% NaOH)	2 Hours	0 (Rating range of 0 to 3)	EN 26987:2012	The flooring surface remained unaffected after the substance was cleaned off using running water.
Hydrogen Peroxide (30% H ₂ O ₂)	2 Hours			
Sulfuric Acid (50% H ₂ SO ₄)	2 Hours			
84 Disinfectant (Brand name of commercial disinfectant)	2 Hours			
Acetone (>95%)	2 Hours			
Ethanol (75%)	2 Hours			
Isopropyl alcohol (> 99.7%)	2 Hours			
Ethyl acetate (> 99.5%)	2 Hours			
Phenol (5% C ₆ H ₅ OH)	2 Hours			
Toluene (> 99.5%)	2 Hours			
Acetic acid (> 99.5%)	2 Hours			



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Appendix A

Document citations



Appendix A – Document citations

Document	Section referenced	Report Number	Link
TIER Residential MSDS	Chemical compatibility section	190801008SHF-001	Link
TIER Commercial MSDS	Chemical compatibility section	200326001SHF-005	Link
TIER Residential SVHC report	Chemical compatibility section	190801008SHF-001	Link
TIER Commercial SVHC report	Chemical compatibility section	200326001SHF-005	Link
TIER VOC Report	Chemical compatibility section	210226009SHF-001	Link
TIER performance report	Mechanical properties section	200629009SHF-001	Link
Castor Chair test	Mechanical properties section	190801008SHF-003	Link
SPC0335 Fire Reaction	Fire Reaction section	190801008SHF-005	Link
Slip resistance	Surface properties section	210201011SHF-001	Link
Slip resistance	Surface properties section	190801008SHF-005	Link
Stain resistance	Surface properties section	190801008SHF-002	Link



Appendix B

Chemical compatibility



Appendix B – Chemical compatibility

The following information provides a list of substances that may negatively impact that TIER Classic wear layer material. On the next page is an extensive (not complete) list of common substances and solutions known to influence the surface of wear layer on TIER Classic. It is important to check material compatibility when choosing chemicals that the product may encounter, as they may prematurely degrade the product, these may include ingredients in cleaning products, pool additives and even oils and saps from local vegetation.

Symbol legend

The symbols and abbreviations used have the following meanings

+	= resistant over a period of months to years
0	= limited resistance: some swelling, solvation or environmental stress cracking is possible
-	= not resistant: severe swelling, decomposition, solvation or environmental stress cracking
sol'n	= saturated aqueous solution
conc	= concentration
sat'd	= saturated

Resistance definition

Good resistance	Water, aqueous salt solutions, detergent solutions, dilute acids, and alkalis.
Limited resistance	Alcohols, aliphatic hydrocarbons, oils, and fats.
Not resistant	Concentrated mineral acids, aromatic and/or halogenated hydrocarbons, esters, ethers, ketones.
Solvents	Examples are methyl ethyl ketone, tetrahydrofuran, toluene, dimethyl-formamide.

Source data:

BASF – Chemical resistance of co-polymers - www.basf.de/plastic

Please continue to the next page for the list of substances.



REAGENT	CONC	LDPE		HDPE	
		70°	140°	70°	140°
Acetone		o	-	o	-
Acetaldehyde*	100%	o	-	o	-
Acetic Acid*	10%	+	+	+	+
Acetic Acid*	60%	+	o	+	o
Acetic Anhydride*		-	-	-	-
Air		+	+	+	+
Aluminium Chloride	all conc	+	+	+	+
Aluminium Fluoride	all conc	+	+	+	+
Aluminium Sulphate	all conc	+	+	+	+
Alums	all types	+	+	+	+
Ammonia	100% dry gas	+	+	+	+
Ammonium Carbonate		+	+	+	+
Ammonium Chloride	sat'd	+	+	+	+
Ammonium Fluoride	sat'd	+	+	+	+
Ammonium Hydroxide	10%	+	+	+	+
Ammonium Hydroxide	28%	+	+	+	+
Ammonium Nitrate	sat'd	+	+	+	+
Ammonium Persulphate	sat'd	+	+	+	+
Ammonium Sulphate	sat'd	+	+	+	+
Ammonium Metaphosphate	sat'd	+	+	+	+
Ammonium Sulfide	sat'd	+	+	+	+
Amyl Acetate#*	100%	-	-	-	-
Amyl Alcohol#*	100%	+	+	+	+
Amyl Chloride#	100%	-	-	-	-
Aniline#*	100%	+	-	-	o
Aqua Regia+		-	-	-	-
Arsenic Acid	all conc	+	+	+	+
Aromatic Hydrocarbons#*		-	-	-	-
Ascorbic Acid	10%	+	+	+	+
Barium Carbonate	sat'd	+	+	+	+
Barium Chloride	sat'd	+	+	+	+
Barium Hydroxide		+	+	+	+
Barium Sulphate	sat'd	+	+	+	+
Barium Sulphide	sat'd	+	+	+	+
Beer		+	+	+	+
Benzene#*		-	-	-	-
Benzoic Acid	all conc	+	+	+	+

REAGENT	CONC	LDPE		HDPE	
		70°	140°	70°	140°
Bismuth Carbonate	sat'd	+	+	+	+
Bleach Lye	10%	+	+	+	+
Borax	sat'd	+	+	+	+
Boric Acid	all conc	+	+	+	+
Boron Trifluoride		+	+	+	+
Brine		+	+	+	+
Bromine+	liquid	-	-	-	-
Bromine Water#	sat'd	-	-	-	-
Butanediol*	10%	+	+	+	+
Butanediol*	60%	+	+	+	+
Butanediol*	100%	+	+	+	+
Butter*		+	+	+	+
n-Butyl Acetate#*	100%	o	-	+	o
n-Butyl Alcohol*	100%	+	+	+	+
Butyric Acid#	conc	-	-	-	-
Calcium Bisulphide		+	+	+	+
Calcium Carbonate	sat'd	+	+	+	+
Calcium Chlorate	sat'd	+	+	+	+
Calcium Chloride	sat'd	+	+	+	+
Calcium Hydroxide	conc	+	+	+	+
Calcium Hypochloride	bleach sol	+	+	+	+
Calcium Nitrate	50%	+	+	+	+
Calcium Oxide	sat'd	+	+	+	+
Calcium Sulphate		+	+	+	+
Camphor Oil#*		-	-	o	-
Carbon Dioxide	all conc	+	+	+	+
Carbon Disulphide		-	-	-	-
Carbon Monoxide		+	+	+	+
Carbon Tetrachloride#		-	-	o	-
Carbonic Acid		+	+	+	+
Castor Oil*	conc	+	+	+	+
Chlorine+	100% dry gas	o	-	-	-
Chlorine Liquid+		-	-	-	-
Chlorine Water+	2% sat'd sol	+	+	+	+
Chlorobenzene#*		-	-	-	-
Chloroform*#		-	-	o	-
Chlorosulphonic Acid	100%	-	-	-	-
Chrome Alum	sat'd	+	+	+	+



REAGENT	CONC	LDPE		HDPE	
		70°	140°	70°	140°
Chromic Acid	80%	-	-	-	-
Chromic Acid	50%	+	o	+	o
Chromic Acid	10%	+	+	+	+
Cider*		+	+	+	+
Citric Acid*	sat'd	+	+	+	+
Coconut Oil Alcohols*		+	+	+	+
Coffee		+	+	+	+
Cola Concentrate*		+	+	+	+
Copper Chloride	sat'd	+	+	+	+
Copper Cyanide	sat'd	+	+	+	+
Copper Fluoride	2%	+	+	+	+
Copper Nitrate	sat'd	+	+	+	+
Copper Sulphate	sat'd	+	+	+	+
Corn Oil*		+	+	+	+
Cottonseed Oil*		+	+	+	+
Cuprous Chloride	sat'd	+	+	+	+
Detergents Synthetic*		+	+	+	+
Developers Photographic		+	+	+	+
Dextrin	sat'd	+	+	+	+
Dextrose	sat'd	+	+	+	+
Diazo Salts		+	+	+	+
Dibutylphthalate*		o	o	o	o
Dichlorobenzene#*		-	-	-	-
Diethyl Ketone##*		o	-	o	o
Diethylene Glycol*		+	+	+	+
Diglycolic Acid*		+	+	+	+
Dimethylamine		-	-	-	-
Disodium Phosphate		+	+	o	+
Emulsions, Photographic*		+	+	+	+
Ethyl Acetate##*	100%	o	-	o	-
Ethyl Alcohol*	100%	+	+	+	+
Ethyl Alcohol*	35%	+	+	+	+
Ethyl Benzene##*		-	-	-	-
Ethyl Chloride#		-	-	-	-
Ethyl Ether#		-	-	-	-
Ethylene Chloride##*		-	-	-	-
Ethylene Glycol*		+	+	+	+
Fatty Acids*		+	+	+	+

REAGENT	CONC	LDPE		HDPE	
		70°	140°	70°	140°
Ferric Chloride	sat'd	+	+	+	+
Ferric Nitrate	sat'd	+	+	+	+
Ferrous Chloride	sat'd	+	+	+	+
Ferrous Sulphate		+	+	+	+
Fish Solubles*		+	+	+	+
Fluoboric Acid		+	+	+	+
Fluosillicic Acid	conc	+	o	+	o
Fluosillicic Acid	32%	+	+	+	+
Formic Acid	all conc	+	+	+	+
Fructose	d	+	+	+	+
Fruit Pulp*		+	+	+	+
Furtural#	100%	-	-	o	-
Furturyl Alcohol#*		-	-	o	-
Gallic Acid*	sat'd	+	+	+	+
Gasoline#*		-	-	o	o
Glucose		+	+	+	+
Glycerine*		+	+	+	+
Glycol*		+	+	+	+
Glycolic Acid*	30%	+	+	+	+
Grape Sugar		+	+	+	+
n-Heptane##*		-	-	o	o
Hexachlorobenzene		+	+	+	-
Hexanol Tertiary*		+	+	+	+
Hydrobromic Acid	50%	+	+	+	+
Hydrochloric Acid	all conc	+	+	+	+
Hydrocyanic Acid	sat'd	+	+	+	+
Hydrofluoric Acid*	60%	+	+	+	+
Hydrogen	100%	+	+	+	+
Hydrogen Chloride dry gas	dry gas	+	+	+	+
Hydrogen Peroxide	30%	+	+	+	+
Hydrogen Peroxide	10%	+	+	+	+
Hydrogen Sulphide		+	+	+	+
Hydroquinone		+	+	+	+
Hypochlorous Acid	conc	+	+	+	+
Inks*		+	+	+	+
Iodine+ in KI sol'n	in KIsol'd	o	-	o	-



REAGENT	CONC	LDPE		HDPE	
		70°	140°	70°	140°
Isopropyl Alcohol	100%	-	-	-	-
Lead Acetate	sat'd	+	+	+	+
Lead Nitrate		+	+	+	+
Lactic Acid*	20%	+	+	+	+
Linseed Oil*	100%	o	-	o	-
Magnesium Carbonate	sat'd	+	+	+	+
Magnesium Chloride	sat'd	+	+	+	+
Magnesium Hydroxide	sat'd	+	+	+	+
Magnesium Nitrate	sat'd	+	+	+	+
Magnesium Sulphate	sat'd	+	+	+	+
Mercuric Chloride	40%	+	+	+	+
Mercuric Cyanide	sat'd	+	+	+	+
Mercury		+	+	+	+
Methyl Alcohol*	100%	+	+	+	+
Methylethyl Ketone##	100%	o	-	o	-
Methylene Chloride##	100%	-	-	o	o
Milk		+	+	+	+
Mineral Oils#		o	-	o	-
Molasses		+	+	+	+
Naphtha#*		o	-	o	-
Naphthalene##		-	-	o	-
Nickel Chloride	conc	+	+	+	+
Nickel Nitrate	sat'd	+	+	+	+
Nickel Sulphate	conc	+	+	+	+
Nicotine*	dilute	+	+	+	+
Nitric Acid	0-30%	+	+	+	+
Nitric Acid+	30-50%	+	o	+	o
Nitric Acid+	70%	+	o	+	o
Nitric Acid+	95-98%	-	-	-	-
Nitrobenzene##	100%	-	-	-	-
n-Octane		+	+	+	+
Oleic Acid		o	-	o	-
Oxalic Acid*	sat'd	+	+	+	+
Perchloroethylene#		-	-	-	-
Phosphoric Acid	95%	+	o	+	+
Photographic Solutions		+	+	+	+
Plating Solutions*					

REAGENT	CONC	LDPE		HDPE	
		70°	140°	70°	140°
Brass		+	+	+	+
Cadmium		+	+	+	+
Chromium		+	+	+	+
Copper		+	+	+	+
Gold		+	+	+	+
Indium		+	+	+	+
Lead		+	+	+	+
Nickel		+	+	+	+
Rhodium		+	+	+	+
Sliver		+	+	+	+
Tin		+	+	+	+
Zinc		+	+	+	+
Potassium Bicarbonate	sat'd	+	+	+	+
Potassium Bromide	sat'd	+	+	+	+
Potassium Bromate	10%	+	+	+	+
Potassium Carbonate		+	+	+	+
Potassium Chlorate	sat'd	+	+	+	+
Potassium Chloride	sat'd	+	+	+	+
Potassium Chromate	40%	+	+	+	+
Potassium Cyanide	sat'd	+	+	+	+
Potassium Dichromate	40%	+	+	+	+
Potassium Ferri/Ferro	Ferro				
Cyanide	sat'd	+	+	+	+
Potassium Fluoride		+	+	+	+
Potassium Hydroxide	conc	+	+	+	+
Potassium Nitrate	sat'd	+	+	+	+
Potassium Perborate	sat'd	+	+	+	+
Potassium Perchlorate	10%	+	+	+	+
Potassium Permanganate	20%	+	+	+	+
Potassium Persulphate	sat'd	+	+	+	+
Potassium Sulphate	conc	+	+	+	+
Potassium Sulphide	conc	+	+	+	+
Potassium Sulphite	conc 100%	+	+	+	+
Propargyl Alcohol*		+	+	+	+
n-Propyl Alcohol*		+	+	+	+



REAGENT	CONC	LDPE		HDPE	
		70°	140°	70°	140°
Propylene Dichloride#*		-	-	-	-
Propylene GlyCol*	sat'd	+	+	+	+
Pyridine*		+	-	+	-
Resorcinol		+	+	+	+
Salicylic Acid	sat'd	+	+	+	+
Sea Water		+	+	+	+
Selenic Acid Shortening*	any conc	+	+	+	+
Sliver Nitrate Sol'n		+	+	+	+
Soap Solutions*	any conc	+	+	+	+
Sodium Acetate	sat'd	+	+	+	+
Sodium Benzoate	35%	+	+	+	+
Sodium Biscarbonate	sat'd	+	+	+	+
Sodium Bisulphate	sat'd	+	+	+	+
Sodium Bisulphite	sat'd	+	+	+	+
Sodium Borate	dilute	+	+	+	+
Sodium Bromide	dilute	+	+	+	+
Sodium Carbonate	conc	+	+	+	+
Sodium Chlorate	sat'd	+	+	+	+
Sodium Chloride	sat'd	+	+	+	+
Sodium Cyanide	sat'd	+	+	+	+
Sodium Dichromate	sat'd	+	+	+	+



Appendix C

ISO 10874/ EN685 Classifications



Appendix C – ISO 10874/ EN685 Classifications

The table below is provided solely for informative purposes, offering contextual information on usage area classifications as defined by ISO 10874/EN 685. Please note that we do not possess this document, and the table is sourced from another website. To ensure accuracy and currency, kindly refer to the latest version of the document on the ISO standards website.

Category	Class	Level of use	Description	Examples of use areas
Domestic	21	Moderate	Areas with low or intermittent use	Bedroom and dining room
	22	General	Areas with medium use	Childrens room, living room, and entrance hall
	23	Heavy	Areas with intense use	Kitchen living room, corridor, office, and entrance hall
Commer- cial	31	Moderate	Areas with low or intermittent use	Bedroom, hotel, conference room, small office
	32	General	Areas with medium traffic	Classroom, small office, hotel, boutique, conference room, doctors practice
	33	Heavy	Areas with heavy traffic	Corridor, department store, school, multi-purpose hall, open plan office, reception
Industrial	34	Very Heavy	Areas with intense use	Airport, multi-purpose hall, counter hall, and department store
	41	Moderate	Areas where work is sedentary with occasional use of light vehicles	Electronic assembly, precision engineering
	42	General	Areas where work is standing and/ or with vehicular traffic	Storage room, electronic assembly
	43	Heavy	Other industrial areas	Storage room, production hall