Material Data Declaration Sheet - v003

Schema Database Version: IEC 62474 X6.01

Substance Database Version: IEC 62474 D18.00

Supplier Information

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Supplier Comments

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Product(s)

Product Family Name:

Requester Item Number	Item Number *	Description	Effective Date *	Mass *	UoM*	Comment
	1SG280LU00XX	1SG280LU00XX	2019-11-12	38.00	g	

Declaration

LHPLA	This product is Low Halogen (Components): Applies only to brominated and chlorinated flame retardants (BFRs/CFRs) and PVC in the final product. The replacement of halogenated flame retardants may not be better for the environment. Intel Components as well as purchased components on the finished assembly meet the joint JEDEC/ECA JS-709B requirement.	True
LHPWB	This product is Low Halogen (PCB): Applies Br/Cl in the PCB Laminate. The PCB / Substrate meet IEC 61249-2-21 requirements. The replacement of halogenated flame retardants may not be better for the environment	True
PVC	This product does not contain PVC	True
SVHC	Product Contains REACh SVHC above .1% of article	False
RoHS.Compliant	Product is compliant with EU RoHS Directive 2 2011/65/EU (Directive 2011/65/EU) and its amendments (e.g. 2015/863/EU)	True

Signature

Intel Product Ecology	C=US, E=productecology@intel.com, OU="", O=Intel Corporation, CN=Intel Product Ecology

Part ID	Description	# of Units	Part Mass %
1SG280LU00XX	1SG280LU00XX	1	100.00

RoHS

Homogenous Material Name	Material Class ID	HM Mass %	Substance Group	Reportable Application	Reporting Threshold	Above Threshold? (T/F)	Substance Mass % of HM	Exemption	Comments
			Benzyl butyl phthalate (BBP)	All	0.1 mass% in homogenous material	false			
			Bis (2-ethylhexyl)phthalate	All	0.1 mass% in homogenous material	false			
			Cadmium/Cadmium compounds	All, except batteries	0.01 mass% of total Cd in homogenous	false			
			Chromium (VI) Compounds	All	0.1 mass% of total Cr+6 in homogenous	false			
			Dibutyl phthalate (DBP)	All	0.1 mass% in homogenous material	false			
			Diisobutyl phthalate	All	0.1 mass% in homogenous material	false			
			Lead/Lead Compounds	All, except for: 1. batteries, 2. surface	0.1 mass% of total Pb in homogenous	false			
			Mercury/Mercury Compounds	All, except batteries	Intentionally Added or 0.1 mass% of total	false			
			Polybrominated biphenyls (PBB)	All	0.1 mass% in homogenous material	false			
			Polybrominated diphenyl ethers (PBDE)	All	0.1 mass% in homogenous material	false			

Low Halogen

Homogenous Material Name	Material Class ID	HM Mass %	Substance Group	Reportable Application	Reporting Threshold	Above Threshold? (T/F)	Substance Mass % of HM	Comments
			Brominated flame retardants (other than	Printed wiring board laminate	0.09 mass% total bromine content in	false		
			Chlorinated Flame Retardants (CFR)	Printed Wiring Board (PWB) Laminates	0.09 mass% total chlorine content in	false		
	M-012		PVC			false		

Other Declarable Substances

Substance Group	Substance	CAS #	Reportable Application	Reporting Threshold	Above Threshold? (T/F)	Substance Mass (% of Article)	Comments
1,6,7,8,9,14,15,16,17,17, 18,18-Dodecachloropent			All	0.1 mass% of article	false		
4-Nonylphenol, branched and linear, ethoxylated			All	0.1 mass% of article	false		
Alkanes, C10-13, chloro (Short Chain Chlorinated			All	Intentionally added or 0.1 mass% of article	false		
Aluminosilicate Refractory Ceramic			All	0.1 mass% of article	false		
Asbestos			All	Intentionally added	false		

Cadmium/Cadmium compounds			Batteries	0.001% by weight of battery	false		
Dibutyltin (DBT) compounds			All	0.1 mass% of tin in the part	false		
Dioctyltin (DOT) compounds			(a) textile and leather articles intended to come	0.1 mass% of tin in the part	false		
Disodium tetraborates			All	0.1 mass% of article	false		
Fluorinated Greenhouse Gases (PFC, SF6, HFC)			All	Intentionally Added	false		
Hexabromocyclododecane (HBCDD)			All	Intentionally added or 0.01 mass% of article	false		
Hexahydromethylphthalic anhydride			All	0.1 mass% of article	false		
Lead/Lead Compounds			Consumer products designed or intended	0.01 mass%	false		
Lead/Lead Compounds			Batteries	0.004 mass% of battery	false		
Mercury/Mercury Compounds			Batteries	Intentionally added or 0.0001 mass% of battery	false		
Nickel/Nickel Compounds			All, where prolonged skin contact is expected	Intentionally Added	false		
Nonadecafluorodecanoic acid (PFDA) and its			All	0.1 mass% of article	false		
Ozone Depleting Substances (CFC, Halon,			All	Intentionally Added	false		
Perchlorates			All	6 x 10 ^-7 mass% of battery or product part	false		
Perfluorohexane-1-sulphonic acid and its salts			All	0.1 mass% of article	false		
Perfluorononan-1-oic-acid and its sodium and			All	0.1 mass% of article	false		
Perfluorooctanoic acid and its salts			All	0.0000025 mass% of PFOA including its salts in	false		
PFOA-related substances			All	0.0001 mass% of one or a combination of	false		
Polychlorinated Biphenyls (PCBs) and			All	Intentionally added	false		
Polychlorinated naphthalenes			All	Intentionally added	false		
Radioactive substances			All	Intentionally added	false		
Tris(4-nonylphenyl, branched and linear)			All	0.1 mass% of article	false		
Tri-substituted organostannic			All	Intentionally added or 0.1 mass% of tin in the part	false		
Zirconia Aluminosilicate Refractory Ceramic			All	0.1 mass% of article	false		
	[Phthalato(2-)]dioxotrilead	69011-06-9	All	0.1 mass% of article	false	0.00	
	1,2-benzenedicarboxylic acid, di-C6-10-alkyl esters	68515-51-5; 68648-93-1	All	0.1 mass% of article	false	0.00	
	1,2-Benzenedicarboxylic acid, di-C6-8-branched	71888-89-6	All	0.1 mass% of article	false	0.00	
	1,2-Benzenedicarboxylic acid, di-C7-11-branched	68515-42-4	All	0.1 mass% of article	false	0.00	
	1,2-Benzenedicarboxylic acid, dihexyl ester,	68515-50-4	All	0.1 mass% of article	false	0.00	
	1,2-Benzenedicarboxylic acid, dipentyl ester,	84777-06-0	All	0.1 mass% of article	false	0.00	
	1,2-bis(2-methoxyethoxy) ethane (TEGDME;	112-49-2	All	0.1 mass% of article	false	0.00	

	1,2-diethoxyethane	629-14-1	All	0.1 mass% of article	false	0.00	
	1,2-dimethoxyethane; ethylene glycol dimethyl	110-71-4	All	0.1 mass% of article	false	0.00	
	1,3-propanesultone	1120-71-4	All	0.1 mass% of article	false	0.00	
	2-(2H-benzotriazol-2-yl)-4-(tert-butyl)-6-(sec-butyl)	36437-37-3	All	0.1 mass% of article	false	0.00	
	2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol	25973-55-1	All	0.1 mass% of article	false	0.00	
	2,2-bis(4'-hydroxyphenyl)-4-methylpentane	6807-17-6	All	0.1 mass% of article	false	0.00	
	2,4-di-tert-butyl-6-(5-chlorobenzotriazol-2-yl)pheno	3864-99-1	All	0.1 mass% of article	false	0.00	
	2-benzotriazol-2-yl-4,6-di-tert-butylphenol (UV-320)	3846-71-7	All	Intentionally added or 0.1 mass% of article	false	0.00	
	2-ethylhexyl 10-ethyl-4,4-dioctyl-7-oxo	15571-58-1	All	0.1 mass% of article	false	0.00	
	4-(1,1,3,3-tetramethylbutyl)phenol	140-66-9	All	0.1 mass% of article	false	0.00	
	4,4'-isopropylidenediphenol	80-05-7	All	Intentionally added or 0.1 mass% of article	false	0.00	
	4-aminoazobenzene	60-09-3	All	0.1 mass% of article	false	0.00	
	Ammonium pentadecafluorooctanoat	3825-26-1	All	0.1 mass% of article	false	0.00	
	Benz[a]anthracene	56-55-3; 1718-53-2	All	0.1 mass% of article	false	0.00	
	Benzo[a]anthracene (BaA)	56-55-3	Rubber or plastic parts that come into direct,	0.0001 mass% of the plastic or rubber part	false	0.00	
	Benzo[a]anthracene (BaA)	56-55-3	Rubber or plastic parts of toys and childcare	0.00005 mass% of the plastic or rubber part	false	0.00	
	Benzo[a]pyrene (BaP)	50-32-8	Rubber or plastic parts that come into direct,	0.0001 mass% of the plastic or rubber part	false	0.00	
	Benzo[a]pyrene (BaP)	50-32-8	Rubber or plastic parts of toys and childcare	0.00005 mass% of the plastic or rubber part	false	0.00	
	Benzo[b]fluoranthene (BbFA)	205-99-2	Rubber or plastic parts that come into direct,	0.0001 mass% of the plastic or rubber part	false	0.00	
	Benzo[b]fluoranthene (BbFA)	205-99-2	Rubber or plastic parts of toys and childcare	0.00005 mass% of the plastic or rubber part	false	0.00	
	Benzo[def]chrysene (Benzo[a]pyrene)	50-32-8	All	0.1 mass% of article	false	0.00	
	Benzo[e]pyrene (BeP)	192-97-2	Rubber or plastic parts that come into direct,	0.0001 mass% of the plastic or rubber part	false	0.00	
	Benzo[e]pyrene (BeP)	192-97-2	Rubber or plastic parts of toys and childcare	0.00005 mass% of the plastic or rubber part	false	0.00	
	Benzo[ghi]perylene	191-24-2	All	0.1 mass% of article	false	0.00	
	Benzo[j]fluoranthene (BjFA)	205-82-3	Rubber or plastic parts that come into direct,	0.0001 mass% of the plastic or rubber part	false	0.00	
	Benzo[j]fluoranthene (BjFA)	205-82-3	Rubber or plastic parts of toys and childcare	0.00005 mass% of the plastic or rubber part	false	0.00	
	Benzo[k]fluoranthene	207-08-9	All	0.1 mass% of article	false	0.00	
	Benzo[k]fluoranthene (BkFA)	207-08-9	Rubber or plastic parts that come into direct,	0.0001 mass% of the plastic or rubber part	false	0.00	
	Benzo[k]fluoranthene (BkFA)	207-08-9	Rubber or plastic parts of toys and childcare	0.00005 mass% of the plastic or rubber part	false	0.00	
	Benzyl butyl phthalate (BBP)	85-68-7	All	0.1 mass% in homogenous material	false	0.00	
	Beryllium Oxide	1304-56-9	All	0.1 mass%	false	0.00	

	Bis (2-ethylhexyl)phthalate	117-81-7	All	0.1 mass% in homogenous material	false	0.00	
	Bis(2-methoxyethyl) ether	111-96-6	All	0.1 mass% of article	false	0.00	
	Bis(2-methoxyethyl) phthalate	117-82-8	All	0.1 mass% of article	false	0.00	
	Bis(pentabromophenyl) ether	1163-19-5	All	0.1 mass% of article	false	0.00	
	Bis(tributyltin) oxide (TBTO)	56-35-9	All	Intentionally added or 0.1 mass% of article	false	0.00	
	Boric acid	10043-35-3; 11113-50-1	All	0.1 mass% of article	false	0.00	
	Cadmium	7440-43-9	All	0.1 mass% of article	false	0.00	
	Cadmium hydroxide	21041-95-2	All	0.1 mass% of article	false	0.00	
	Cadmium oxide	1306-19-0	All	0.1 mass% of article	false	0.00	
	Cadmium sulphide	1306-23-6	All	0.1 mass% of article	false	0.00	
	Chrysen (CHR)	218-01-9	Rubber or plastic parts that come into direct,	0.0001 mass% of the plastic or rubber part	false	0.00	
	Chrysen (CHR)	218-01-9	Rubber or plastic parts of toys and childcare	0.00005 mass% of the plastic or rubber part	false	0.00	
	Chrysene	218-01-9; 1719-03-5	All	0.1 mass% of article	false	0.00	
	Cobalt dichloride	7646-79-9	All	0.1 mass% of article	false	0.00	
	Decamethylcyclopentasiloxane	541-02-6	All	0.1 mass% of article	false	0.00	
	Diarsenic pentoxide	1303-28-2	All	0.1 mass% of article	false	0.00	
	Diarsenic trioxide	1327-53-3	All	0.1 mass% of article	false	0.00	
	Dibenzo[a,h]anthracene (DBAhA)	53-70-3	Rubber or plastic parts that come into direct,	0.0001 mass% of the plastic or rubber part	false	0.00	
	Dibenzo[a,h]anthracene (DBAhA)	53-70-3	Rubber or plastic parts of toys and childcare	0.00005 mass% of the plastic or rubber part	false	0.00	
	Diboron trioxide	1303-86-2	All	0.1 mass% of article	false	0.00	
	Dibutyl phthalate (DBP)	84-74-2	All	0.1 mass% in homogenous material	false	0.00	
	Dibutyltin dichloride (DBTC)	683-18-1	All	0.1 mass% of article	false	0.00	
	Dicyclohexyl phthalate	84-61-7	All	0.1 mass% of article	false	0.00	
	Diisobutyl phthalate	84-69-5	All	0.1 mass% in homogenous material	false	0.00	
	Di-isodecyl phthalate (DIDP)	68515-49-1; 26761-40-0	All	Intentionally added	false	0.00	
	Diisononyl phthalate (DINP)	28553-12-0; 68515-48-0	All	Intentionally added	false	0.00	
	Diisopentyl phthalate	605-50-5	All	0.1 mass% of article	false	0.00	
	Dimethylfumarate (DMF)	624-49-7	All	0.00001 mass% of the part	false	0.00	
	Di-n-hexyl phthalate (DnHP)	84-75-3	All	Intentionally added or 0.1 mass% of article	false	0.00	
	Dioxobis(stearato)trilead	12578-12-0	All	0.1 mass% of article	false	0.00	
	Dipentyl phthalate (DPP)	131-18-0	All	0.1 mass% of article	false	0.00	

	Disodium 3,3'-[[1,1'-biphenyl]-4,4'-d	573-58-0	All	0.1 mass% of article	false	0.00	
	Disodium 4-amino-3-[[4'-[(2,4-diami	1937-37-7	All	0.1 mass% of article	false	0.00	
	Disodium octaborate	12008-41-2	All	0.1 mass% of article	false	0.00	
	Dodecamethylcyclohexasiloxane	540-97-6	All	0.1 mass% of article	false	0.00	
	Fatty acids, C16-18, lead salts	91031-62-8	All	0.1 mass% of article	false	0.00	
	Fluoranthene	206-44-0; 93951-69-0	All	0.1 mass% of article	false	0.00	
	Formaldehyde	50-00-0	Textiles	0.0075 mass % of textile	false	0.00	
	Imidazolidine-2-thione (2-imidazoline-2-thiol)	96-45-7	All	0.1 mass% of article	false	0.00	
	Lead	7439-92-1	All	0.1 mass% of article	false	0.00	
	Lead chromate	7758-97-6	All	0.1 mass% of article	false	0.00	
	Lead chromate molybdate sulphate red (C.I. Pigment	12656-85-8	All	0.1 mass% of article	false	0.00	
	Lead cyanamidate	20837-86-9	All	0.1 mass% of article	false	0.00	
	Lead dinitrate	10099-74-8	All	0.1 mass% of article	false	0.00	
	Lead oxide sulfate	12036-76-9	All	0.1 mass% of article	false	0.00	
	Lead sulfochromate yellow (C.I. Pigment	1344-37-2	All	0.1 mass% of article	false	0.00	
	Lead titanium trioxide	12060-00-3	All	0.1 mass% of article	false	0.00	
	Lead titanium zirconium oxide	12626-81-2	All	0.1 mass% of article	false	0.00	
	N,N-dimethylformamide	68-12-2	All	0.1 mass% of article	false	0.00	
	N-pentyl-isopentylphthalate	776297-69-9	All	0.1 mass% of article	false	0.00	
	Octamethylcyclotetrasiloxane	556-67-2	All	0.1 mass% of article	false	0.00	
	Orange lead (lead tetroxide)	1314-41-6	All	0.1 mass% of article	false	0.00	
	Pentadecafluorooctanoic acid (PFOA)	335-67-1	All	0.1 mass% of article	false	0.00	
	Pentalead tetraoxide sulphate	12065-90-6	All	0.1 mass% of article	false	0.00	
	Pentazinc chromate octahydroxide	49663-84-5	All	0.1 mass% of article	false	0.00	
	Phenanthrene	85-01-8	All	0.1 mass% of article	false	0.00	
	Potassium hydroxyoctaoxodizincatedi	11103-86-9	All	0.1 mass% of article	false	0.00	
	Pyrene	129-00-0; 1718-52-1	All	0.1 mass% of article	false	0.00	
	Pyrochlore, antimony lead yellow	8012-00-8	All	0.1 mass% of article	false	0.00	
	Reaction mass of 2-ethylhexyl		All	0.1 mass% of article	false	0.00	
	Silicic acid (H2Si2O5), barium salt (1:1),	68784-75-8	All	0.1 mass% of article	false	0.00	
	Strontium chromate	7789-06-2	All	0.1 mass% of article	false	0.00	

	Sulfurous acid, lead salt, dibasic	62229-08-7	All	0.1 mass% of article	false	0.00	
	Terphenyl, hydrogenated	61788-32-7	All	0.1 mass% of article	false	0.00	
	Tetralead trioxide sulphate	12202-17-4	All	0.1 mass% of article	false	0.00	
	Trilead dioxide phosphonate	12141-20-7	All	0.1 mass% of article	false	0.00	
	Tris(2-chloroethyl) phosphate	115-96-8	All	0.1 mass% of article	false	0.00	
	Trixylyl phosphate	25155-23-1	All	0.1 mass% of article	false	0.00	