# **Material Data Declaration Sheet - v003**

Schema Database Version: IEC 62474 X6.01 Substance Database Version: IEC 62474 D14.00



## **Supplier Information**

Company Name * Intel Corporation	Contact Name * Brand, Allyce
Response Document ID 32060	Contact Title * Intel Product Ecology
Company Unique ID 047897855	Contact Phone * 1-800-628-8686
Unique ID Authority Dun and Bradstreet	Contact Email * productecology@intel.com
<b>Response Date *</b> 2018-03-07	

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# Product(s)

## Product Family Name:

Requester Item Number	Item Number *	Description	Effective Date *	Mass *	UoM*	Comment
	CD8067303734802S	CD8067303734802S	2018-03-07	50.90000	g	

## Declaration

	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	
LHPLA	meet the joint JEDEC/ECA JS-709B requirement.	True
PVC	This product does not contain PVC	True
SVHC	Product Contains REACh SVHC above .1% of article	False
RoHS.Compliant	Product Meets EU RoHS Directive 2 2011/65/EU Requirements	True

## Signature

Intel Product Ecology

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

#### RoHS

Homogenous Materi	al				Reporting	Above	Substance Mass % of		
Name	Material Class ID	HM Mass %	Substance Group	<b>Reportable Application</b>	Threshold	Threshold? (T/F)	нм	Exemption	Comments
			Cadmium/Cadmium compounds	All, except batteries	0.01 mass% of total Cd in homogenous	false			
			Chromium (VI) Compounds	All	0.1 mass% of total	false			
			Lead/Lead Compounds	All, except for: 1.	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 (PBBs)	All	0.1 mass% in homogenous material	false			
			Polybrominated Diphenylethers (PBDEs)	All	0.1 mass% in homogenous material	false			

### Low Halogen

Homogenous N	laterial				Reporting	Above	Substance Mass % of	
Name	Material Class ID	HM Mass %	Substance Group	<b>Reportable Application</b>	Threshold	Threshold? (T/F)	НМ	Comments
			Brominated flame	Printed wiring board	0.09 mass% total	false		
			retardants (other than	laminate	bromine content in	Taise		
			Brominated flame	Plastic materials except	0.1 mass% of	false		
			retardants (other than	printed wiring board	hromine in plastic			
			Chlorinated Flame	Plastic materials except	0.1 mass% chlorine in	falso		
			Retardants (CFR)	printed wiring board	plastic materials	Taise		
			Chlorinated Flame	Printed Wiring Board	0.09 mass% total	false		
			Retardants (CFR)	(PWB) Laminates	chlorine content in	ומוזכ		
	M-012		PVC			false		

#### Other Declarable Substances

Substance Group	Substance	CAS #	Reportable Application	Reporting Threshold	Above Threshold? (T/F)	Substance Mass (% of Article)	Comments
4-Nonylphenol, branched and linear, ethoxylated	1		All		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 tip in the	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		

			1				
Hexabromocyclododecan			All	Intentionally added or	false		
e (HBCDD) and all major				0.01 mass% of article			
Hexahydromethylphthali			All	0.1 mass% of article	false		
c anhydride							
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			All, where prolonged skin		e .		
Compounds			contact is expected	Intentionally Added	false		
Nonadecafluorodecanoic acid (PFDA) and its			All	0.1 mass% of article	false		
Ozone Depleting			A.II.	Interationally, Added	falsa		
Substances (CFC, Halon,			All	Intentionally Added	false		
Perchlorates			All	6 x 10 ^-7 mass% of battery or product part	false		
Perfluorohexane-1-sulph							
onic acid and its salts			All	0.1 mass% of article	false		
Perfluorononan-1-oic-aci d and its sodium and			All	0.1 mass% of article	false		
Polychlorinated			A 11	Later and the set of the set	( . l		
Biphenyls (PCBs) and			All	Intentionally added	false		
Polychlorinated			A 11	المغم مغذم محالب مطط مط	falsa		
Naphthalenes (PCNs)			All	Intentionally added	false		
Radioactive substances			All	Intentionally added	false		
Tri-substituted			All	Intentionally added or 0.1	false		
organostannic			/	mass% of tin in the part	10130		
Zirconia Aluminosilicate			All	0.1 mass% of article	false		
Refractory Ceramic							
	[Phthalato(2-)]dioxotrilea d	69011-06-9	Heat stabilizer for plastics, for example for	0.1 mass% of article	false	0.0000	
	1,2-benzenedicarboxylic	68515-51-5,	Plasticisers, lubricants,	0.1 mass% of article	false	0.0000	
	acid, di-C6-10-alkyl esters;	68648-93-1	adhesives, coatings,				
	1,2-Benzenedicarboxylic	71888-89-6	Plasticizer, dye, pigment,	0.1 mass% of article	false	0.0000	
	acid, di-C6-8-branched		paint, ink, adhesive,				
	1,2-Benzenedicarboxylic acid, di-C7-11-branched	68515-42-4	Plasticizer, dye, pigment, paint, ink, adhesive,	0.1 mass% of article	false	0.0000	
	1,2-Benzenedicarboxylic acid, dihexyl ester,	68515-50-4	Used as a plasticizer for certain plastics and	0.1 mass% of article	false	0.0000	
	1,2-Benzenedicarboxylic	84777-06-0	Plasticizer in plastic	0.1 mass% of article	false	0.0000	
	acid, dipentylester,		materials in specialist		· · · -		
	1,2-bis(2-methoxyethoxy) ethane (TEGDME;	112-49-2	Solvent may be used in battery electrolytes for	0.1 mass% of article	false	0.0000	
	1,2-Diethoxyethane	629-14-1	Solvent used in electrolytes for lithium	0.1 mass% of article	false	0.0000	
	1,2-dimethoxyethane;	110-71-4	Solvent used in battery	0.1 mass% of article	false	0.0000	
	ethylene glycol dimethyl	110-71-4	electrolytes for lithium		ומואל	0.0000	
	1,3-propanesultone	1120-71-4	Electrolyte fluid of rechargeable lithium ion	0.1 mass% of article	false	0.0000	
	2-(2H-benzotriazol-2-yl)-4 -(tert-butyl)-6-(sec-butyl)	36437-37-3	UV stabilizer	0.1 mass% of article	false	0.0000	
	2-(2H-benzotriazol-2-yl)-4	25973-55-1	UV stabilizer	0.1 mass% of article	false	0.0000	
	,6-ditertpentylphenol 2,4-di-tert-butyl-6-(5-chlo						
	robenzotriazol-2-yl)pheno	3864-99-1	UV stabilizer	0.1 mass% of article	false	0.0000	
	2-benzotriazol-2-yl-4,6-di-	3846-71-7	UV-stabilizer in	Intentionally added or 0.1	false	0.0000	
	tert-butylphenol (UV-320) 2-ethylhexyl		adhesives, paints,	mass% of article	-		
	2-ethyliexyl 10-ethyl-4,4-dioctyl-7-oxo	15571-58-1	PVC stabilizer	0.1 mass% of article	false	0.0000	

4-(1,1,3,3-tetrame vl)phenol	140-66-9	Unreacted process chemical	0.1 mass% of article	false	0.0000	
4,4'-isopropyliden	ediphen 80-05-7	Antioxidant for plasticizer and PVC, ink,	Intentionally added or 0.1 mass% of article	false	0.0000	
4-Aminoazobenze	ne 60-09-3	Used as yellow pigment	0.1 mass% of article	false	0.0000	
Ammonium		and in inks, including inks APFO is used as an				
pentadecafluoroo		emulsion stabilizer to	0.1 mass% of article	false	0.0000	
Benzenamine, N-p reaction products	68971-45-9	Lubricating agent in motors, storage drives;	Intentionally added	false	0.0000	
Benzo[a]anthrace	ne 56-55-3	Impurities in carbon black, which is used as	0.0001 mass% of the plastic or rubber part	false	0.0000	
Benzo[a]anthrace	ne 56-55-3	Impurities in carbon	0.00005 mass% of the	false	0.0000	
Benzo[a]pyrene	50-32-8	black, which is used as Impurities in carbon	plastic or rubber part 0.0001 mass% of the	false	0.0000	
		black, which is used as Impurities in carbon	plastic or rubber part 0.00005 mass% of the			
Benzo[a]pyrene	50-32-8	black, which is used as	plastic or rubber part	false	0.0000	
Benzo[b]fluoranth	nene 205-99-2	Impurities in carbon black, which is used as	0.0001 mass% of the plastic or rubber part	false	0.0000	
Benzo[b]fluoranth	nene 205-99-2	Impurities in carbon black, which is used as	0.00005 mass% of the plastic or rubber part	false	0.0000	
Benzo[def]chryse	ne 50-32-8	Impurities in carbon black, which is used as	0.1 mass% of article	false	0.0000	
Benzo[e]pyrene	192-97-2	Impurities in carbon black, which is used as	0.0001 mass% of the plastic or rubber part	false	0.0000	
Benzo[e]pyrene	192-97-2	Impurities in carbon black, which is used as	0.00005 mass% of the plastic or rubber part	false	0.0000	
Benzo[j]fluoranth	ene 205-82-3	Impurities in carbon black, which is used as	0.0001 mass% of the plastic or rubber part	false	0.0000	
Benzo[j]fluoranth	ene 205-82-3	Impurities in carbon black, which is used as	0.00005 mass% of the plastic or rubber part	false	0.0000	
Benzo[k]fluoranth	iene 207-08-9	Impurities in carbon black, which is used as	0.0001 mass% of the plastic or rubber part	false	0.0000	
Benzo[k]fluoranth	iene 207-08-9	Impurities in carbon black, which is used as	0.00005 mass% of the plastic or rubber part	false	0.0000	
Benzyl butyl phtha (BBP)	alate 85-68-7	Plasticizer, dye, pigment, paint, ink, adhesive,	0.1 mass% in homogenous material	false	0.0000	
Beryllium Oxide	1304-56-9	Ceramics	0.1 mass%	false	0.0000	
Bis (2-ethylhexyl)phtl	117-81-7	Plasticizer, dye, pigment, paint, ink, adhesive,	0.1 mass% in homogenous material	false	0.0000	
Bis(2-methoxyeth	yl) ether 111-96-6	Electrolyte in lithium batteries	0.1 mass% of article	false	0.0000	
Bis(2-methoxyeth phthalate	yl) 117-82-8	Plasticizer	0.1 mass% of article	false	0.0000	
Bis(pentabromop ether	henyl) 1163-19-5	Flame retardant	0.1 mass% of article	false	0.0000	
Bis(tributyltin) oxi (TBTO)	56-35-9	Antiseptic, antifungal agent, paint, pigment,	Intentionally added or 0.1 mass% of article	false	0.0000	
Boric Acid	10043-35-3, 11113-50-1	In wood veneers/ pressed wooden panels	0.1 mass% of article	false	0.0000	
Cadmium	7440-43-9	Pigments, anti-corrosion surface treatments,	0.1 mass% of article	false	0.0000	
Cadmium oxide	1306-19-0	Relay contact; photodiode voltaic cell,	0.1 mass% of article	false	0.0000	
Cadmium sulphide	e 1306-23-6	Used in photo-resistors, solar cells and	0.1 mass% of article	false	0.0000	
Chrysen	218-01-9	Impurities in carbon black, which is used as	0.0001 mass% of the plastic or rubber part	false	0.0000	
Chrysen	218-01-9	Impurities in carbon black, which is used as	0.00005 mass% of the plastic or rubber part	false	0.0000	

Cobalt dichloride	7646-79-9	Pneumatic panels to indicate water	0.1 mass% of article	false	0.0000	
Diarsenic pentoxide	1303-28-2	Additive in wood, metal, glass and plastics	0.1 mass% of article	false	0.0000	
Diarsenic trioxide	1327-53-3	Additive in wood, metal, glass and plastics	0.1 mass% of article	false	0.0000	
Dibenzo[a,h]anthracene	53-70-3	Impurities in carbon black, which is used as	0.0001 mass% of the plastic or rubber part	false	0.0000	
Dibenzo[a,h]anthracene	53-70-3	Impurities in carbon black, which is used as	0.00005 mass% of the plastic or rubber part	false	0.0000	
Diboron trioxide	1303-86-2	Found in wood veneers, glass/fiberoptics and	0.1 mass% of article	false	0.0000	
Dibutyl phthalate (DBP)	84-74-2	Plasticizer, dye, pigment, paint, ink, adhesive,	0.1 mass% in homogenous material	false	0.0000	
Dibutyltin dichloride (DBTC)	683-18-1	Ingredient in some paint thinner and as heat	0.1 mass% of article	false	0.0000	
Diisobutyl phthalate	84-69-5		0.1 mass% in homogenous material	false	0.0000	
Di-isodecyl phthalate (DIDP)	68515-49-1, 26761-40-0	Plasticizer, dye, pigment, paint, ink,	Intentionally added	false	0.0000	
Diisononyl phthalate (DINP)	28553-12-0, 68515-48-0	Used as a plasticizer for PVC	Intentionally added	false	0.0000	
Diisopentylphthalate	605-50-5	Plasticizer in plastic materials in specialist	0.1 mass% of article	false	0.0000	
Dimethyl Fumarate (DMF)	624-49-7		0.00001 mass% of the part	false	0.0000	
Di-n-hexyl Phthalate (DnHP)	84-75-3	Plasticizer, dye, pigment, paint, ink, adhesive,	Intentionally added or 0.1 mass% of article	false	0.0000	
Dioxobis(stearato)trilead	12578-12-0	Heat stabilizer for plastics, for example for	0.1 mass% of article	false	0.0000	
Dipentyl phthalate (DPP)	131-18-0	Plasticizer in PVC and nitrocellulose resin and	0.1 mass% of article	false	0.0000	
Disodium 3,3'-[[1,1'-biphenyl]-4,4'-d	573-58-0	Dye for textiles and paper	0.1 mass% of article	false	0.0000	
Disodium 4-amino-3-[[4'-[(2,4-diami	1937-37-7	Used in ink for printers	0.1 mass% of article	false	0.0000	
Fatty acids, C16-18, lead salts	91031-62-8	Heat stabilizer for plastics, for example for	0.1 mass% of article	false	0.0000	
Formaldehyde	50-00-0	Textiles	0.0075 mass % of textile	false	0.0000	
Imidazolidine-2-thione; (2-imidazoline-2-thiol)	96-45-7	used as a catalyst in some acrylic adhesive	0.1 mass% of article	false	0.0000	
Lead chromate	7758-97-6	Colorant in plastics; Colorant in paint	0.1 mass% of article	false	0.0000	
Lead chromate molybdate sulphate red (C.I. Pigment	12656-85-8	Colorant in plastics; Colorant in red paint	0.1 mass% of article	false	0.0000	
Lead cyanamidate	20837-86-9	Used in anticorrosion coatings e.g. steel articles	0.1 mass% of article	false	0.0000	
Lead dinitrate	10099-74-8	Heat stabilizer in nylon and polyesters, also used	0.1 mass% of article	false	0.0000	
Lead oxide sulfate	12036-76-9	Heat stabilizer for PVC used for wiring and	0.1 mass% of article	false	0.0000	
 Lead sulfochromate vellow (C.I. Pigment	1344-37-2	Colorant in plastics; Colorant in yellow paint	0.1 mass% of article	false	0.0000	
Lead titanium trioxide	12060-00-3	In piezoelectric components, ultrasound	0.1 mass% of article	false	0.0000	
Lead titanium zirconium oxide	12626-81-2	In piezoelectric components, ultrasound	0.1 mass% of article	false	0.0000	
N,N-dimethylformamide	68-12-2	Used as electrolyte in electrolytic capacitors	0.1 mass% of article	false	0.0000	
N-pentyl-isopentylphthala te	776297-69-9	Plasticizer in plastic materials in specialist	0.1 mass% of article	false	0.0000	

Orange lead (lead tetroxide)	1314-41-6	Used in rust-proof primer paints	0.1 mass% of article	false	0.0000	
Pentadecafluorooctan acid (PFOA)	oic 335-67-1	PFOA is used as an emulsion stabilizer to	0.1 mass% of article	false	0.0000	
Pentalead tetraoxide sulphate	12065-90-6	Heat stabilizer for plastics; for example,	0.1 mass% of article	false	0.0000	
Pentazinc chromate octahydroxide	49663-84-5	Colorant	0.1 mass% of article	false	0.0000	
Potassium hydroxyoctaoxodizinc			0.1 mass% of article	false	0.0000	
Pyrochlore, antimony yellow	lead 8012-00-8	Used as yellow pigment for coloring plastics and	0.1 mass% of article	false	0.0000	
reaction mass of 2-ethylhexyl			0.1 mass% of article	false	0.0000	
Silicic acid (H2Si2O5), barium salt (1:1),	68784-75-8	Used in UV emitting light bulbs and lamps	0.1 mass% of article	false	0.0000	
Strontium chromate	7789-06-2	Pigment; corrosion resistant coating	0.1 mass% of article	false	0.0000	
Sulfurous acid, lead sa dibasic	<sup>lt,</sup> 62229-08-7	Heat stabilizer for PVC, for example for wiring	0.1 mass% of article	false	0.0000	
Tetralead trioxide sulphate	12202-17-4	Heat stabilizer for PVC, for example for wiring	0.1 mass% of article	false	0.0000	
Trilead dioxide phosphonate	12141-20-7	Heat stabilizer for PVC, for example for wiring	0.1 mass% of article	false	0.0000	
Tris(2-chloroethyl)phc ate	<sup>sph</sup> 115-96-8		0.1 mass% of article	false	0.0000	
Trixylyl phosphate	25155-23-1	Used as a plasticizer for vinyl resin, cellulose	0.1 mass% of article	false	0.0000	