

RALEI

IV

Sulta 11-14, Helicopter Centre, Malaysia International Aerospace Centre, Sultan Abdul Aziz Shah Airport, 47200 Subang, Selangor, Malaysia.

Tel: +603 7734 7226 | Fax: +603 7734 7526

www.galaxyaerospace.my | enquiry@yalaxyaerospace.my



CLIENT/OWNER: GADING AIR SDN. BHD. SERIAL NO. **HOURS** LDG/CYCLE WORKSHEET NO: 8729-020 1089 **AIRCRAFT** REFER WORKPACK AIRCRAFT TYPE: EC120 B WORK/INSP/DESC: REAR FUSELAGE - CHECK REGISTRATION: 9M-GAS #1 ENGINE: 34077 REFER WORKPACK 9M-GAS-8729 WORKPACK REF: BASE/FACILITY: WMSA #2 ENGINE: NIL REFER WORKPACK REFER WORKPACK AJL REF NO .: DATE IN: REFER WORKPACK OUT: REFER WORKPACK SHEET: NG/N1 NF/N2 Reason for raising: MAINTENANCE BRIDGING TO BE CARRIED OUT I.A.W Raised by and date: Other requirements/information: Muhammad Ihsan Masri ORION H120 007.00 (UPDATE 01) - 2021-09-06 REAR FUSELAGE - CHECK FOR CORROSION ON TAIL BOOM 11/11/2021 Item Description Technician * Eng. CRS Date 1 Perform a check for corrosion and cracks at the VHF (Very High Frequency) antenna attachments on the tail boom. 14 MARCH REF: AD NO. 2020-0015, NEW ISSUE// ASB 53A017 R1 SATISFACTORY. REMARKS: The work recorded above has been carried out in accordance with the requirements of the Malaysian Civil Aviation Regulation for the time being in force and in that respect the aircraft / equipment is considered fit for release to service. *The work recorded above has been carried out in accordance with the requirements of the for the time being in force and in that respect the aircraft / equipment is considered fit for release to service. ☐ TICK ✓ WHERE APPLICABLE ROUIL HGHIE 143U ADDITIONA MONFORED FIANNING

CENTROCATE

ALEO RECOFD



FABIL

per jamen

INP

PUII

COMPAN

GALAXY AEHUSPACE (M) SUN, BHD, [104U2b2-U]
Suite 11-14, Helicopter Centre, Malaysia International Aerospace Centre,
Sultan Abdul Aziz Shah Airport, 47200 Subang, Selangor, Malaysia,
Tei: +603 7734 7252 | Fax: +603 7734 7526
www.galaxyaerospace.my | enquiry@galaxyaerospace.my

PAKIS KEPUKI

CLIENT/OWNER: GADING AIR SDN. BHD. SERIAL NO. HOURS LDG/CYCLE WORKSHEET NO: 8729-020 1089 REFER WORKPACK AIRCRAFT WORK/INSP/DESC: REAR FUSELAGE - CHECK AIRCRAFT TYPE: EC120 B 34077 REFER WORKPACK #1 ENGINE: 9M-GAS-8729 REGISTRATION: 9M-GAS WORKPACK REF: NII BASE/FACILITY: WMSA REFER WORKPACK #2 ENGINE: AJL REF NO .: REFER WORKPACK DATE IN: REFER WORKPACK OUT: REFER WORKPACK NG/N1 NF/N2 SHEET: REASON FOR RAISING: MAINTENANCE BRIDGING TO BE CARRIED OUT I.A.W Raised by and date: Muhammad Ihsan Masri Other requirements/information: ORION H120 007.00 (UPDATE 01) - 2021-09-06 REAR FUSELAGE - CHECK FOR CORROSION ON TAIL BOOM NIL 11/11/2021 Serial Number Part No Lifed Item Information Release Item Description Qty Position Reason Off TSN/TSO/DUE/TIMEX On Reference 22256 BC TAIL SCREW uls 41N 2918 NSN 42M 03 0500 12L BOOM ECS 2338. BONDERITE M-CR 1132 AZERG MAIL 2 DR 61N 2872 MSH NJY 01 BOOM CHO-LUBE CONDUCTIVE SILICONE TAIL 3. 454 GIN 1234 OR NSN -E117 GREASE MICO SEALING COMPOUND PR177/132 TAIL 67N 2860 NSN NCY 4. DI OR BOOM NAME FIRM SIGN & APPROVAL DATE GACATY AGRIPACE. AKMAL MULAK 15 APRIL UM 🗹 *The work recorded above has been carried out in accordance with the requirements of the Malaysian Civil Aviation Regulation for the time being in force and in that respect the aircraft / equipment is considered fit for release to service. The work recorded above has been carried out in accordance with the requirements of the for the time being in force and in that respect the aircraft / equipment is considered fit for release to service. ☐ TICK ✓ WHERE APPLICABLE MUMBORED DEFECT DURINGST 80.01 Unit isst ADDITON: PLA INIA: FORECAS TREET. ENGINE LUC PROFELIF OFM/COLIP MOD RELORD

SERVI ITEM ID: DESCRIPTION:	CEAB 36804 SCREW	LE		GalaxyAerospace maintenance.repair.overhau
PART_NO:	9840-05-12-1	4	QTY:	3.00
SERIAL NO:	N/A		BIN:	D -06-01
CONDITION:	NE		LOCATIO	
TSN:			TSO:	
SHELF DUE / EXI	P DATE:		1	
JOB ID:	9982	PO ID:		SIGN:
GIN / ID. NO:	GiN2918	APPROVAI	L: REROSA (IN)	¥

GAM/E-005 Rev 2 (01/21)

SERVI ITEM ID:	CEAB 36023	LE			Galaxy	Aerospace (mean overes)
DESCRIPTION:	Bonderite M-	CR 1132 A	2ERO			
PART NO:	ECS2338.10			QTY:		1.00
SERIAL NO:				BIN:		1.00
CONDITION:	NE			LOCATION	ı.	
TSN:					V.	POL GAM HQ
SHELF DUE / EXF	P DATE:	-		TSO:		
JOB ID:	9982	PO ID:			SIGN:	A
GIN / ID. NO:	GiN2872	APPROV		ERONO NOT3)	0	

GAM/E-005 Rev 2 (01/21)

3					
SERVI ITEM ID:	CEAB 36839				Aerospace e.repair.overhau
DESCRIPTION:	CONDUCTIVI	SILICONE GR	EASE (200G)		
PART NO:	CH0-LUBE-E	117	QTY:		1.00
SERIAL NO:	N/A		BIN:		P -18-00
CONDITION:	NE		LOCATION	N:	POL GAM HQ
TSN:			TSO:		
SHELF DUE / EX	P DATE:	22/03/2023			
JOB ID:	9982	PO ID:		SIGN:	
GIN / ID. NO:	GiN1234	APPROVAL:	1000 PM	0	8



Tel.: 011 603 7887 0426

Fax: 011 603 7887 0526

PRIME INDUSTRIES, INC.

Peachtree City. GA 30298

Tel: (770) 632-1851

UNITED STATES Fax (770) 632-1852

www.primeindustriesusa.com



CERTIFICATE OF CONFORMANCE

Frint Date: Feb-28-2022 1 47 PM Printed By . Sharon Lacourty Print No Your P.O.: PO-22-4660 No.: 049950 Pg:1/1 Sold To : Account No. [GALAXY] Shipped To: GALAXY AEROSPACE (M) SON BHD GALAXY AEROSPACE (M) SON BHD Attn: Nur Syamim Syuhada Amdan SUITE 11-14, HELICOPTER CENTER SUITE 11-14, HELICOPTER CENTER MALAYSIA INTERNATIONAL AEROSPACE CENTRE MALAYSIA INTERNATIONAL AEROSPACE CENTRE SULTAN ABDUL AZIZ SHAH AIRPORT SULTAN ABDUL AZIZ SHAH AIRPORT SELANGOR, SUBANG 47200 SELANGOR, SUBANG 47200 MALAYSIA MALAYSIA Tel.: 011 603 7887 0426

Fax: 011 603 7887 0526

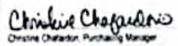
5.O. No. : 040503 Our Ref Domestic AWB: : 116459-ML Customer P.O.: PO-22-4660 Int'l AWB :559554764216 Your Ref. Invoice Date : Feb-28-2022 Fin.Dest. : MALAYSIA Origin End-User : 9M-GAS Transport: : FEDEX INT'L PRIORITY COLLE License No. Ship Via : NLR Nationality: F.O.B. : EX-WORKS Expires Trip/Flight: : NET-30 DAYS Shipped Date : Feb-28-2022 Terms : Marc Lacourty

Our Contact Email: mlacourly@primeindustriesusa.com Ship Via Acct - FEDEX INT1 PRIORITY COLLECT Account No. 945878371

Line	P/N & Description	Cnd	Qty Ordered	Shipped	Unit Sell Price	Amount
2	9840-05-12-14 SCREW Pick Ticket / Packing Slip No. : 049950 IW: 22256BC050012L Trace To: MECAERO Mfr. Name: MECAERO Mfr. Lot#: 1016	FN	50EA	(Oty Back 0)		

IT IS HEREBY CERTIFIED THAT ALL GOODS SUPPLIED AND SHIPPED HEREWITH UNDER THE ABOVE REFERENCED PURCHASE ORDER ARE IN ACCORDANCE WIT ALL APPLICABLE REQUIREMENTS. IT IS FURTHER CERTIFIED THAT ALL GOODS ARE OF THE QUALITY SPECIFIED AND CONFORM WITH ALL APPLICABLE CONTRACTIPURCHASE ORDER REQUIREMENTS, INCLUDING SPECIFICATIONS, DRAWINGS, PRESERVATION, PACKAGING, PACKING, AND MARKING REQUIREME AND PHYSICAL ITEM IDENTIFICATION

IT IS FURTHER CERTIFIED THAT, TO THE BEST OF OUR KNOWLEDGE. THE COMPONENTS LISTED ABOVE HAVE NOT BEEN SUBJECTED TO SEVERE STRESS OR HEAT (UNLESS OTHERWISE SPECIFIED), AND THAT THE COMPONENTS HAVE NOT BEEN OBTAINED FROM NON CIVIL AVIATION SOURCES (FOR COMMERCIAL & GENERAL AVIATION AIRCRAFT ONLY) AND ARE TRACEABLE TO THE CERTIFYING SOURCE(S) REFERRED TO ABOVE





Skybase Spares Sdn Bhd

Taman Bukit Anggerik

23 Jalan 1/154,

56000 Cheras

Certificate of Analysis

DATE **PAGE** 09 February 2022

1 from 1

YOUR ORDER: DATE OF ORDER:

SKY/2021/Nov/001169 / 0

02.11.2021

ORDER:

3900407

DELIVERY NOTE:

9926303546

DELIVERY POSITION:

900001

CUSTOMER NO:

2607519

Material:

BONDERITE M-CR 1132 AERO

known as ALODINE 1132 TOUCH-N-PREP COATING CASE12

Item Number:

1445846

Batch no:

PB13458492

Manufacture Date:

27 August 2021

Use By:

27 August 2023

Manufacturer:

Henkel US Operations Corporation

Product Property	Analysis	Specifi	cation	Unit of Measure
pH Value	2.150	1.950	- 2.250	
Dry residue, Solid content	1.10	1.00	- 1.20	%
free acidity	2.8	2.5	- 3.7	ml
appearance Clear, brownish yellow- green	ok		-	-
Total Acidity	10.70	10.50	- 13.00	ml
Chrome III	0.48	0.45	- 0.55	%

ACCEPTED

It is hereby certified that the material batch as listed in this certificate, was tested at the time of manufacture to the methods as mentioned above. The data contained herein are furnished for information only and are believed to be reliable. We cannot assume responsibility for the results obtained by others over whose methods we have no control. It is the user's responsibility to determine suitability for the user's purpose of any production methods mentioned herein and to adopt such precautions as may be advisable for the protection of property and of persons against any hazards that may be involved in the handling and use thereof. In the light of the foregoing, we specifically disclaim all warranties expressed or implied, including warranties of merchantability or fitness for a particular purpose, arising from sale or use of our products. We specifically disclaim any liability for consequential or incidental damages of any kind, purpose, ansing from sale of use of our products. We specifically disclaim any hability for consequential of incluence damages of any including lost profits, except if otherwise explicitly agreed and except in relation to death or personal injury caused by Henkel's gross negligence or intention and any liability under any applicable mandatory product liability law. The discussion herein of various processes or compositions is not to be interpreted as representation that they are free from domination of patents owned by others or as a licence under any Henkel patents that may cover such processes or compositions. We recommend that each prospective user test his proposed application before repetitive use, using this data as a guide.

SDS No.: 555556 V001.4

BONDERITE M-CR 1132 AERO

Page 2 of 10

Hazard statement:

H350 May cause cancer.

H411 Toxic to aquatic life with long lasting effects.

Precaution:

Prevention:

P201 Obtain special instructions before use.

P273 Avoid release to the environment.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

Response:

P308+P313 IF exposed or concerned: Get medical advice/attention.

P391 Collect spillage.

Disposal:

P501 Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of

disposal.

Section 3. Composition / information on ingredients

Substance or Mixture:

Mixture

Declaration of hazardous chemical:

Hazard component CAS-No.	Content	GHS Classification
dichromium tris(chromate)	0.1- 1%	Oxidizing solids 1
24613-89-6		H271
		Skin corrosion/irritation 1A
		H314
		Serious eye damage/eye irritation 1
		H318
	1	Skin sensitizer 1
	1	H317
		Carcinogenicity 1B
		H350
		Acute hazards to the aquatic environment 1
		H400
		Chronic hazards to the aquatic environment 1
		H410
Chromium orthophosphate	0.1- 1%	Acute toxicity 4; Oral
7789-04-0		H302
		Serious eye damage/eye irritation 2
		H319

Section 4. First aid measures

Inhalation:

If mist or vapor of this product is inhaled, remove person immediately to fresh air. Seek

medical attention if symptoms develop or persist.

Skin contact:

For skin contact, flush with large amounts of water. Seek immediate medical attention.

Remove contaminated clothing and footwear.

Discard any shoes or clothing items that cannot be decontaminated.

Eye contact:

In case of contact with the eyes, rinse immediately with plenty of water for 15 minutes,

and seek immediate medical attention.

Ingestion:

Get immediate medical attention.

DO NOT induce vomiting unless directed to do so by medical personnel.

Give one to two glasses of water or milk.

Never give anything by mouth to a victim who is unconscious or is having convulsions.



Safety Data Sheet

Page 1 of 10

SDS No.: 555556

V001.4

Revision: 08.01.2021 printing date: 28.06.2021

Section 1. Identification of the substance/preparation and of the company/undertaking

Product name:

BONDERITE M-CR 1132 AERO

Other means of identification:

BONDERITE M-CR 1132 AERO

BONDERITE M-CR 1132 AERO

Product code:

IDH1445846

Recommended use of the chemical and restrictions on use

Intended use:

Coating

Identification of manufacturer, importer or distributor

Importer: Henkel (Malaysia) Sdn Bhd

Unit 2.01, 2.02, Level 2, MERCU 3, Jalan Bangsar, KL Eco City, 59200 Kuala Lumpur, Malaysia.

Phone: +603 22461000 Fax: +60322461188

E-mail address of person responsible for Safety Data ap-ua-psra.sea@henkel.com

Sheet:

Emergency information:

FOR EMERGENCIES ONLY (Spill, major leak, Fire, Exposure, or Accident). Call

CHEMTREC: +1 703-741-5970

Section 2. Hazards identification

GHS Classification:

Hazard Class

Hazard Category

Carcinogenicity Chronic hazards to the aquatic Category 1B Category 2

environment

GHS label elements:

Hazard pictogram:



Signal word:

Danger

Section 5. Fire fighting measures

Suitable extinguishing media:

Use media appropriate for surrounding material.

Specific hazards arising from the

chemical:

This product is an aqueous mixture which will not burn.

Special protection equipment and

precautions for firefighters:

Wear full protective clothing.

Wear self-contained breathing apparatus.

Hazardous combustion products:

Irritating and toxic gases or fumes may be released during a fire.

Section 6. Accidental release measures

Personal precautions:

Avoid contact with skin and eyes. Keep unprotected persons away.

Environmental precautions:

Prevent further leakage or spillage if safe to do so.

Clean-up methods:

Absorb spill with inert material. Shovel material into appropriate container for disposal.

Dispose of contaminated material as waste according to Section 13.

Section 7. Handling and storage

Handling:

Prevent contact with eyes, skin and clothing. Do not breathe vapor and mist. Wash

thoroughly after handling.

Do not reuse the empty container.

For industrial use only.

Storage:

Store between 40°F and 104°F. (5°C and 40°C)

Store in tightly closed containers. In a cool/well-ventilated area.

Isolate from incompatible substances. Thaw and mix thoroughly if frozen.

V001.4

Section 8. Exposure controls / personal protection

Components with specific control parameters for workplace:

CHROMIUM, WATER-SOLUBLE CR VI COMPOUNDS, NOC 24613-89-6	Value type	Time Weighted Average (TWA):
	mg/m ³	0.05
	Remarks	MY OEL
HEXAVALENT CHROMIUM INORGANIC COMPOUNDS, INCLUDING CHROMITE ORE PROCESSING, AS CR (VI), INHALABLE FRACTION 24613-89-6	Value type	Short Term Exposure Limit (STEL):
	mg/m³	0.0005
	Remarks	ACGIH
HEXAVALENT CHROMIUM WATER SOLUBLE INORGANIC COMPOUNDS, INCLUDING CHROMITE ORE PROCESSING, AS CR (VI), INHALABLE FRACTION 24613-89-6	Value type	Short Term Exposure Limit (STEL):
	mg/m ³	0.0005
	Remarks	ACGIH
HEXAVALENT CHROMIUM WATER SOLUBLE INORGANIC COMPOUNDS, INCLUDING CHROMITE ORE PROCESSING, AS CR (VI), INHALABLE FRACTION 24613-89-6	Value type	Time Weighted Average (TWA):
	mg/m³	0.0002
Ì	Remarks	ACGIH
HEXAVALENT CHROMIUM INORGANIC COMPOUNDS, INCLUDING CHROMITE ORE PROCESSING, AS CR (VI), INHALABLE FRACTION 24613-89-6	Value type	Time Weighted Average (TWA):
	mg/m ³	0.0002
İ	Remarks	ACGIH
HEXAVALENT CHROMIUM WATER SOLUBLE INORGANIC COMPOUNDS, INCLUDING CHROMITE ORE PROCESSING, AS CR (VI), INHALABLE FRACTION 24613-89-6	Value type	Skin designation:
P S S	Remarks	ACGIH Danger of cutaneous absorption
CHROMIUM, INSOLUBLE CR VI COMPOUNDS, NOC 24613-89-6	Value type	Time Weighted Average (TWA):
	mg/m³	0.01
1	Remarks	MY OEL
CHROMIUM, METAL AND CR III COMPOUNDS, AS CR 7789-04-0	Value type	Time Weighted Average (TWA):
1/10/-04-0	mg/m³	0.5
1	Remarks	MY OEL
TRIVALENT CHROMIUM WATER SOLUBLE INORGANIC COMPOUNDS, INCLUDING CHROMITE ORE PROCESSING, AS CR (III), INHALABLE FRACTION 7789-04-0	Value type	Time Weighted Average (TWA):
1767-04-0	mg/m³	0.003
	Remarks	ACGIH
TRIVALENT CHROMIUM INORGANIC COMPOUNDS, INCLUDING CHROMITE ORE PROCESSING, AS CR (III), INHALABLE FRACTION 7789-04-0	Value type	Time Weighted Average (TWA):
17757-01-0	mg/m³	0.003

BONDERITE M-CR 1132 AERO

V001.4

Malue type mg/m³ Remarks Value type	Time Weighted Average (TWA): 0.05 MY OEL
Remarks	
Remarks	
Value type	
	Short Term Exposure Limit (STEL):
mg/m³	0.0005
Remarks	ACGIH
Value type	Short Term Exposure Limit (STEL):
mg/m³	0.0005
Remarks	ACGIH
Value type	Time Weighted Average (TWA):
mg/m³	0.0002
Remarks	ACGIH
Value type	Time Weighted Average (TWA):
mg/m³	0.0002
	ACGIH
Value type	Skin designation:
Remarks	ACGIH Danger of cutaneous absorption
Value type	Time Weighted Average (TWA):
mg/m³	0.01
Remarks	MY OEL
Value type	Time Weighted Average (TWA):
mg/m³	0.05
Remarks	MY OEL
Value type	Short Term Exposure Limit (STEL):
mg/m³	0.0005
Remarks	ACGIH
	Short Term Exposure Limit (STEL):
mg/m³	0.0005
Remarks	ACGIH
Value type	Time Weighted Average (TWA):
	mg/m³ Remarks Value type mg/m³ Remarks Value type mg/m³ Remarks Value type Remarks Value type mg/m³ Remarks Value type mg/m³ Remarks Value type mg/m³ Remarks Value type

SDS No.: 555556 V001.4

BONDERITE M-CR 1132 AERO

INCLUDING CHROMITE ORE PROCESSING, AS CR (VI), INHALABLE FRACTION 24613-89-6 HEXAVALENT CHROMIUM INORGANIC COMPOUNDS, INCLUDING CHROMITE ORE PROCESSING, AS CR (VI), INHALABLE FRACTION 24613-89-6	mg/m³ Remarks Value type	0.0002 ACGIH Time Weighted Average (TWA):
	mg/m³	0.0002
	Remarks	ACGIH
HEXAVALENT CHROMIUM WATER SOLUBLE INORGANIC COMPOUNDS, INCLUDING CHROMITE ORE PROCESSING, AS CR (VI), INHALABLE FRACTION 24613-89-6	Value type	Skin designation:
	Remarks	ACGIH Danger of cutaneous absorption
CHROMIUM, INSOLUBLE CR VI COMPOUNDS, NOC 24613-89-6	Value type	Time Weighted Average (TWA):
	mg/m³	0.01
	Remarks	MY OEL

Respiratory protection:

If ventilation is not sufficient to effectively prevent buildup of aerosols, mists or vapors,

appropriate NIOSH/MSHA respiratory protection must be provided.

Eye protection:

Wear chemical goggles; face shield (if splashing is possible).

Body protection:

Chemical resistant, impermeable gloves.

Use of impervious apron and boots are recommended.

Engineering controls:

Provide local and general exhaust ventilation to effectively remove and prevent buildup of

any vapors or mists generated from the handling of this product.

Hygienic measures:

Wash hands before work breaks and after finishing work. Do not eat, drink or smoke while

working.

Section 9. Physical and chemical properties

Appearance:

Yellow green

Liquid

Odor threshold (CA):

Mild No data available.

pH: Melting point / freezing point: 1.95 - 2.25

No data available.

Specific gravity:

1.00 - 1.01

> 100 °C (> 212 °F)

Boiling point: Flash point:

Not applicable

Evaporation rate: Flammability (solid, gas): No data available. No data available. No data available.

Lower explosive limit: Upper explosive limit: Vapor pressure:

No data available. No data available. No data available.

Vapor density: Density: Solubility:

No data available. No data available.

Partition coefficient: n-

No data available.

octanol/water: Auto ignition:

No data available. No data available.

Decomposition temperature:

No data available.

Viscosity:

V001.4

BONDERITE M-CR 1132 AERO

VOC content:

No data available.

Section 10. Stability and reactivity

Reactivity/Incompatible

materials:

Reaction with strong bases

Chemical stability:

Stable under recommended storage conditions. Will not occur.

Possibility of hazardous reactions: Conditions to avoid:

No decomposition if used according to specifications.

Hazardous decomposition

None if used for intended purpose.

products:

In case of fire toxic gases can be released.

Section 11. Toxicological information

Oral toxicity:

Acute toxicity estimate (ATE): > 2,000 mg/kg

Method: Calculation method

Inhalative toxicity:

Acute toxicity estimate (ATE): > 20 mg/l

Exposure time: 4 h Test atmosphere: Vapor. Method: Calculation method

Symptoms of Overexposure:

None known.

Acute oral toxicity:

dichromium tris(chromate)	Value type	Acute toxicity estimate (ATE)
24613-89-6	Value	100 mg/kg
	Species	
	Method	Expert judgement
dichromium tris(chromate)	Value type	LD50
24613-89-6	Value	50 - 300 mg/kg
	Species	rat
	Method	OECD Guideline 423 (Acute Oral toxicity)

Acute dermal toxicity:

dichromium tris(chromate)	Value type	LD50
24613-89-6	Value	> 2,000 mg/kg
	Species	rat
	Method	OECD Guideline 402 (Acute Dermal Toxicity)

Serious eye damage/irritation:

dichromium tris(chromate)	Result	irritating	
24613-89-6	Exposure time		
	Species	rabbit	
	Method	not specified	

Germ cell mutagenicity:

dichromium tris(chromate)	Result	positive
24613-89-6	Type of study / Route of administration	bacterial reverse mutation assay (e.g Ames test)
	Metabolic activation / Exposure time	with and without
	Method	OECD Guideline 471 (Bacterial Reverse Mutation Assay)

Section 12. Ecological information

General ecological information:

Do not empty into drains / surface water / ground water.

Ecotoxicity:

Toxic to aquatic life with long lasting effects.

Toxicity:

dichromium tris(chromate)	Value type	LC50
24613-89-6	Value	> 10,000 mg/l

SDS No.: 555556 V001.4

BONDERITE M-CR 1132 AERO

	Acute Toxicity Study	Fish			
	Exposure time	96 h			
	Species	Brachydanio rerio (new name: Danio rerio)			
	Method	ISO 7346-1 (Determination of the Acute Lethal Toxicity of Substances to a Freshwater Fish [Brachydanio rerio Hamilton-Buchanan (Teleostei Cyprinidae)]			
dichromium tris(chromate)	Value type	NOEC			
24613-89-6	Value	4.01 μg/l			
	Acute Toxicity Study	Algae			
	Exposure time	72 h			
	Species	Desmodesmus subspicatus			
	Method	EU Method C.3 (Algal Inhibition test)			
And the second s	Value type	EC50			
	Value	76.14 µg/l			
	Acute Toxicity Study	Algae			
	Exposure time	72 h			
	Species	Desmodesmus subspicatus			
	Method	EU Method C.3 (Algal Inhibition test)			
dichromium tris(chromate)	Value type	EC 50			
24613-89-6	Value	> 10,000 mg/l			
	Acute Toxicity Study	Bacteria			
	Exposure time	3 h			
	Species				
	Method	ISO 8192 (Test for Inhibition of Oxygen Consumption by Activated Sludge)			
Chromium orthophosphate	Value type	LC50			
7789-04-0	Value	> 100 mg/l			
	Acute Toxicity Study	Fish			
	Exposure time	48 h			
	Species	Leuciscus idus			
	Method	OECD Guideline 203 (Fish, Acute Toxicity Test)			
Chromium orthophosphate	Value type	EC0			
7789-04-0	Value	> 100 mg/l			
	Acute Toxicity Study	Bacteria			
	Exposure time				
	Species				
	Method	not specified			

Section 13. Disposal considerations

Product

Method of disposal:

Dispose of in accordance with local and national regulations.

Packaging

Disposal of uncleaned packages:

Packaging that cannot be cleaned are to be disposed of in the same manner as the product.

Section 14. Transport information

Road transport ADR:

Class: 9
Packing group: III
Classification code: M6
Hazard ident. number: 90
UN no.: 3082
Label: 9

Technical name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,

N.O.S. (Chromium(III)-chromate)

BONDERITE M-CR 1132 AERO

Railroad transport RID:

Class: Packing group:

Classification code: Hazard ident. number:

UN no.: Label:

Technical name:

9 III

M6 90

3082

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,

N.O.S. (Chromium(III)-chromate)

Inland water transport ADN:

Class: Packing group:

Classification code: Hazard ident. number:

UN no.:

UN no.: Label:

Technical name:

9

III M6

3082

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,

N.O.S. (Chromium(III)-chromate)

Marine transport IMDG:

Class:

Packing group: UN no.:

UN no.: Label:

EmS: Seawater pollutant: 308

3082

F-A ,S-F Marine pollutant

Proper shipping name: Marine pollutant: Marine pollutant: ENVIRONME

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,

N.O.S. (Chromium(III)-chromate)

Air transport IATA:

Class:

Packing group:

Packaging instructions (passenger): Packaging instructions (cargo): UN no.:

Label: Proper shipping name: III

964 964

3082

Environmentally hazardous substance, liquid, n.o.s. (Chromium(III)-

chromate)

Further information for transport:

The transport classifications in this section apply generally to packed and bulk goods alike. For containers with a net volume of no more than 5 L for liquid substances or a net mass of no more than 5 kg for solid substances per individual or inner package, the exemptions SP 375 (ADR), 197 (IATA), 969 (IMDG) may be applied, which can result in a deviation from the transport classification for packed goods.

Section 15. Regulatory information

BONDERITE M-CR 1132 AERO

Regulatory Information:

Occupational Safety and Health (Classification, Labelling and Safety Data Sheet of Hazardous

Chemicals) Regulations 2013 [P.U.(A) 310/213]

Industry Code of Practice on Chemicals Classification and Hazard Communication

Global inventory status:

Regulatory list	Notification
TSCA	yes
DSL	yes
KECI (KR)	yes
IECSC	yes
AICS	yes
NZIOC	yes
TCSI	yes
CH INV	yes
EINECS	yes

Section 16. Other information

Disclaimer:

This Safety Data Sheet has been generated based on Occupational Safety and Health (Classification, Labelling and Safety Data Sheet of Hazardous Chemicals) Regulations 2013 [P.U.(A) 310/213] only. No warranty or representation of any kind is given with respect to the substantive or export laws of any other jurisdiction or country. Please confirm that the information provided herein conforms to the substantive export or other law of any other jurisdiction prior to export. Please contact Henkel Product Safety and Regulatory Affairs for additional assistance. This information is based on our current level of knowledge and relates to the product in the state in which it is delivered. It is intended to describe our products from the point of view of safety requirements and is not intended to guarantee any particular properties.

Dear Customer,

Henkel is committed to creating a sustainable future by promoting opportunities along the entire value chain. If you would like to contribute by switching from a paper to the electronic version of SDS, please contact the local Customer Service representative. We recommend to use a non-personal email address (e.g. SDS@your_company.com).



SO:FAKVL5

INVOICE NUMBER K55ZEV

PAGE 1 OF 4

Boeing Distribution Services Inc.

Tel: +1 305 925 2600 + Fax: +1 305 507 7191 + www BoeingDistribution com
Remit to Address: 88289 Expedite Way Chicago, il. 60695-0001

Wire Instructions: Boeing Distribution Services Inc. + JPMorgan Chase Bank New York
ABA 021000021 + Account 304639273 + SWFT, CHASUS33 + CHIP UID 0002

SOLD TO:

GALAXY AEROSPACE (M) SDN BHD LOT 11-14 MRO CENTER, MALAYSIAN INTL AEROSPACE CENTER SULTAN ABDUAL AZIZ SHAH AIRPORT 47200 SUBANG, SELANGOR

SHIP TO:

GALAXY AEROSPACE (M) SDN BHD LOT 11-14 MRO CENTER, MALAYSIAN INTL AEROSPACE CENTER SULTAN ABDUAL AZIZ SHAH AIRPORT 47200 SUBANG, SELANGOR

RDER NO.			DATE	SHIP VIA					TERMS			ING TERMS	
PO-21			04/20/21	FEDX	INTL	ECON	COLL		NET 30		FCA	-SELLER'S	WE
EM	QUANTITY	PART NUI	ABER AND DESCRIPTION			PRICE		UNIT	BACK ORDER	SHIPPED		AMOUNT	
0.	ORDERED 1	Commanda Andrews Andre	nercial PN: 10/7997 cainer Size: 5 N :EURNL IFF :38249992 LUBE E117 nercial PN: -LUBE E117 cainer Size: 2 N :EURNL IFF :34C39900 08194 mercial PN: /08194 tainer Size: 5 N :EURNL IFF :34C39901	00GM	M			CA EA	0		1		
* * * * * * * * * * * * * * * * * * *	manufacturing ranted for DU) relying operations authorized authorized B-based held by a granted aperiod), managemen	Authorier Electrical Spinson and contion duse downs UK on authorized the mea	risation: Base U-REACH Annex ecific uses of an upstream a nditions and r and are requir s (REACH Art.) tream users (I r an EU/EEA co horisation dec comply with sures describe	XIV and this author risk marked to (66). Upon pany cision the open in	athor prodisati anage fulf K-REA an e (i.e befo erati the a	is uc on me il CH xi re on ut	ilite i n	be sed mpl es ot: rot REI ear of		lly m users in the uties for 21): sation n has tion cuired to	* (* * * * * * * * * * * * * *	*	

ALL ITEMS ARE SUBJECT TO A 100% RESTOCKING CHARGE.

SHIPPED FROM: KISDORFER WEG 36-38, 24568, KALTENKIRCHEN, GERMANY

MATERIAL CERTIFICATION: Bosing Distribution Services inc. ("BOEING DISTRIBUTION SERVICES") WARRANTS THAT THE ITEMS SUBJECT OF THIS INVOICE, ARE IN CONFORMITY WITH ALL OF MATERIAL AND WORKMANSHIP AND, AS SET FORTH ON THE MATERIAL CERTIFICATION FORM ACCOMPANYING THE ITEMS SUBJECT OF THIS INVOICE, ARE IN CONFORMITY WITH ALL OF MATERIAL AND WORKMANSHIP AND, AS SET FORTH ON THE MATERIAL CERTIFICATION FORM ACCOMPANYING THE ITEMS SUBJECT OF THIS INVOICE, ARE IN CONFORMITY WITH ALL OF MATERIAL AND WORKMANSHIP AND THE SPECIFICATIONS OF THE RESPECTIVE MANUFACTURERS. BOEING DISTRIBUTION SERVICES IS EXPRESSLY LIMITED OR IMPLIED, INCLUDING ALL WARRANTES OF MERCHANTABLITY AND OF FITNESS FOR A PARTICULAR PURPOSE. THE LIABILITY OF BOEING DISTRIBUTION SERVICES IS EXPRESSLY LIMITED OR IMPLICATION OF ALL OF ANY ITEM WHICH IS REJECTED CONSTITUTE SATISFACTION OF ALL EXCLUSIVELY TO REPLACEMENT BECAUSE OF A DEFECT IN MATERIAL OR WORKMANSHIP SUCH REPLACEMENT SHALL OF ANY ITEM WHICH IS REJECTED CONSECUENCY WITH SUCH ITEM, WHETHER LIABILITY IS BASED UPON CONTRACT RIGHTS, NEGLIGENCE, OR OTHERWISE, AND IN LIABILITY BOEING DISTRIBUTION SERVICES MAY HAVE IN CONNECTION WITH SUCH ITEM, WHETHER LIABILITY IS BASED UPON CONTRACT RIGHTS, NEGLIGENCE, OR OTHERWISE, AND IN LIABILITY BOEING DISTRIBUTION SERVICES MAY HAVE IN CONNECTION WITH SUCH ITEM, WHETHER LIABILITY IS BASED UPON CONTRACT RIGHTS, NEGLIGENCE, OR OTHERWISE, AND IN REJECTION OF AN ITEM WITHIN 30 DAYS AFTER RECEIPT BY THE CUSTOMER. 1

PACKING SLIP

Senior Director, Genel Quality

BY RECEIVING DELIVERY OF THE ITEMS COVERED BY THIS INVOICE, BUYER AGREES TO THE TERMS AND CONDITIONS OF SALE AT:
https://www.boeingdistribution.com/aero/conditions-sale/



ACCUSE DE RECEPTION DE COMMANDE

32566 Y/CDE : PO : 001089U

Payment terms :

CODE INT.

8848

08/08/2001

BUREAU FRANCE 2, rue des Gaillards - B.P. 20 - Z.l. des Doucettes

95141 Garges lès Gonesse cedex (France) Qualifié : VERITAS, QUALIFAS "A Mode de règlement : CHEQUE A 90 JOURS 11860 . WEST STATE ROAD 84 TUDADIVEED DAVIE, FL 33325 U.S.A.

True Certifie opy

Page :

Code CLIENT : 41260237

Adresse Facturation / Sold to PRIME INDUSTRIES

11860 , WEST STATE ROAD 84 SUITE # B-14

DAVIE, FL 33325 Etats-Unis d'Amériqu U.S.A.

Affaire suivie par : DIVERS

0134450825 REFERENCE OTE UNIT PRIX REM MONTANT LOT DELAI LOT DE MATERIEL 1 LOY DE MATERIEL / LISTE JOINTE 32/01 PIECES MECABRO LISTE JOINTE 87 PAGES POUR 940449 PIECES DE VISSERIE AERONAUTIQUE HARDWARE CUSTOMS VALUE: USD

MANUFACTURER : MECAERO

ORIGINE : FRANCE

Nous your remercions pour votre commande et acoustant acoption comme ci-dessus.

Thank you for vain mider please find herewith our sales order acknowledge.

Dans le cas d'une offre de prix initiale spécifiant une révision de prix, celle ci est appliquée lorsque la devise d'achat varie de plus

TOTAL H.T.

Port

TX TVA

Montant TVA

TOTAL TTC

0.00

USD Euro ;

> S.A. EUREP INDUSTRIES au capital de 2 000 000 F - 304.898 Euros - R.C.S. Pontoise B 322 032 376 00038 - A.P.E. 516 J - FR 32 322 032 376 Tél.: 01 34 45 00 20 - Télécopleur: 01 39 93 61 57 - E-mail: www.eurep.fr

SERVI ITEM ID:	CEAB 36840	LE				xyAerospace enance.repair.ovenhau
DESCRIPTION:	Sealing Comp	ound CM 60	068			
PART NO:	PR1771B2			QTY:		1.00
SERIAL NO:				BIN:	- 21/001-2	
CONDITION:	NE			LOCATION	J:	POL GAM HQ
TSN:				TSO:		,
SHELF DUE / EX	P DATE:	01/06/202	22			
JOB ID:	9982	PO ID:			SIGN:	Q .
GIN / ID. NO:	GiN2860	APPROVA		MO22		W/

GAM/E-005 Rev 2 (01/21)

Konformitätszeugnis



HAIII-DHD-MARA VA

Hamburg-Finkenwerder 21129 Duitsland

According To / According To NF L00-015C

C of C Number : / GO_HH_SE287420 Dokument-Nr:

Pag.1/1

Customer Address:/

Kundenname & Kundenadresse:

DIN-EN-ISO 9001

Cert No.: ISO 9001:2008 : Cert No. DE005549-1

PPG Product Number: /

PR1771B2-1025

PPG Artikel-Nr.:

Product Description:/
Produktbeschreibung:

PR1771B2 Non Chromate LW Corrosion

Inhibitive Sealant 250ml kit

Comments:/Bemerkungen:

IN COMPLIANCE WITH CHEMICAL REGISTRATION LAWS OF EUROPE IM EINKLANG MIT DEN EUROPÄISCHEN GESETZEN HINSICHTLICH DER CHEMISCHE

REGISTRIERUNGEN

Customer Part Number : /

Kunden Artikel-Nr:

cification/Standard:/Spezifikation:

PPG Standard

Manufacturing Site / Fertigungsstatte

PR1771B2-1025 PR1771B2-ISKU20 Manufactured in Shildon,GB Manufactured in Shildon,GB

Customer Order Number: / 02132201

Kunden Bestell-Nr:

Delivery Note: /

4149081

Lieferschein-Nr:

Lot Number:/

G33 176384

Lot/Chargen Nr:

Cuantity:/

-12.00EA / 3.00L

L .ermenge:

Expires After:/ Verfallsdatum: Jun-22 / Jun-22

Date of Manufacture: /

Date of Manufacture.

Dec-21 / Dez-21

Herstelldatum:

Despatch Date:/

21-Jan-22 / 21-Jan-22

Versanddatum:

Certified that the supplies detailed hereon have been inspected and tested in accordance with the conditions and requirements of the contract or purchase order, and unless otherwise noted conform in all respects to the specification(s), drawing(s) relevant thereto and have been produced in accordance with the company approvals listed above.

Es wird bestätigt, dass die oben aufgeführten Güter gemäß den Bedingungen und Anforderungen des zugrundeliegenden Auftrages geprüft und freigegeben worden sind und allen dazugehörigen Spezifikationen bzw. Zeichnungen entsprechen, sowie in Übereinstimmung mit den oben aufgeführten Firmenzulassungen produziert worden sind, es sei denn, es wird ausdrücklich etwas anderes vermerkt.

Für

PPG Deutschland Sales & Services GmbH

Signed by : / Unterzeichnet:

Valid without signature / Ohne Unterschrift gültig

Date:/Datum:

21/01/201

Certificate of Conformity / Déclaration de Conformité

PPG Aerospace

Sealants Europe SAS 84 rue Salvador Allende

Bezons 95870 France

According To / Selon NF 1.00-015C

C of C Number: / BZS_ASC55162 N° de Document:

Customer Address : / Nom & Adresse du Client:

Pag.1/1 Qualifications site

ISO9001:2015 nº FR049178-2

IATF16949 : nº FFIA-16327/14-TS IATF331760

AS9100:D - JISQ 9100:2016 / EN9100:2016 nº 7125689-rev0

PPG Product Number:/ Code Produit PPG:

PR1776B2AS-F1025

Comments: / Commentaires:

Product Description:/

PR 1776 B 2 KIT 25 AS

Description du produit:

'stomer Part Number : / .de Produit du Client:

olfloation/Standard: / Spécification:

ants Europe Standard

Manufacturing Site / Fabrication du site

PR1776B2A8-F1025 PR1776B2AS-FISKU200

Manufactured in Bezons,FR Manufactured in Bezons,FR

Sustomer Order Number : /

V° Commande Clienti

)elivery Note:/

1º Bordereau de Livraison:

.ot Number:/ luméro de Lot:

antity:/

""ntité livrée:

res After:/

d'expiration:

rate of Manufacture:/ ate de fabrication:

ate d'expédition:

espatch Date:/

Aug-2021 Aug-2021

Feb-2022

02131063

F452103325

BZS 53942F

12.00EA / 1.00BOX

Sertified that the supplies detailed hereon have been inspected and tested in accordance with the conditions and requirements of the contract or purchase index, and unless otherwise noted conform in all respects to the specification(s), drawing(s) relevant thereto and have been produced in accordance with the

lous déclarons que la fourniture citée est conforme aux exigences du contrat et que, après vérifications et essais, elle répond en tous points, aux exigences pécifiées, aux normes et réglements applicables, sauf exceptions, réserves ou dérogations énumérées dans la présente déclaration de conformité.

> SEALANTS EURORE CONTRÖLEUR 1

Sealants Europe SAS

Signed by : / Signature du Vérificateur:

Date: / Date:

17/08/2021

SAFETY DATA SHEET

Date of issue/Date of revision

: 5 April 2018

Version : 1.02



SECTION 1: Identification of the substance/mixture and of the company/ undertaking

1.1 Product identifier

Product name : PR1776B2AS-F Base Product code : PR1776B2AS-F Base

Other means of identification

: Not available.

1.2 Relevant identified uses of the substance or mixture and uses advised against

Product use : Industrial applications.

Use of the substance/

: Sealants

mixture

1.3 Details of the supplier of the safety data sheet

Sealants Europe SAS 84 rue Salvador Allende 95870 Bezons France

+33 (0) 1 34 23 38 00

PPG Deutschland Sales & Services GmbH Hein-Sass-Weg 29 D-21129 Hamburg-Finkenwerder Germany +49 (40) 742 193 10

PPG Coatings S.A. 7, Allée de la Plaine Gonfreville l'Orcher 76700 HARFLEUR France +33 (0)2 3553 5400

e-mail address of person responsible for this SDS

: AeroPSreachEMEA@ppg.com

1.4 Emergency telephone number

Supplier

+44 (0) 1388 772 541

: PR1776B2AS-F Base

Date of issue/Date of revision

: 5 April 2018

PR1776B2AS-F Base

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Product definition

: Mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Aquatic Chronic 2, H411

The product is classified as hazardous according to Regulation (EC) 1272/2008 as amended.

See Section 16 for the full text of the H statements declared above.

See Section 11 for more detailed information on health effects and symptoms.

2.2 Label elements

Hazard pictograms

Signal word

: No signal word.

Hazard statements

: Toxic to aquatic life with long lasting effects.

Precautionary statements

Prevention

: Avoid release to the environment.

Response Storage

: Collect spillage. : Not applicable.

Disposal

: Not applicable.

P273, P391

Hazardous ingredients

Supplemental label

: Not applicable.

: Not applicable.

elements

: Contains thiram (ISO), 2,2'-thiodiethanethiol and Phenol-formaldehyde resin. May produce an allergic reaction.

Annex XVII - Restrictions

on the manufacture. placing on the market and use of certain dangerous substances, mixtures and

articles

Special packaging requirements

Containers to be fitted

with child-resistant

: Not applicable.

fastenings

Tactile warning of danger : Not applicable.

2.3 Other hazards

Other hazards which do not result in classification : Prolonged or repeated contact may dry skin and cause irritation.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

: Mixture

Code : PR1776B2AS-F Base

Date of issue/Date of revision

: 5 April 2018

PR1776B2AS-F Base

SECTION 3: Composition/information on ingredients

			Classification	
Product/ingredient name	Identifiers	% by weight	Regulation (EC) No. 1272/2008 [CLP]	Туре
Propane, 1,2,3-trichloro-, polymer with 1,1'-[methylenebis(oxy)]bis [2-chloroethane] and sodium sulfide (Na2(Sx)), reduced	CAS: 68611-50-7	≥25 - ≤50	Aquatic Chronic 3, H412	[1]
ethyl acetate	REACH #: 01-2119475103-46 EC: 205-500-4 CAS: 141-78-6 Index: 607-022-00-5	≥1.0 - ≤5.0	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336 EUH066	[1] [2]
titanium dioxide	REACH #: 01-2119489379-17 EC: 236-675-5 CAS: 13463-67-7		Not classified.	[2]
thiram (ISO)	EC: 205-286-2 CAS: 137-26-8 Index: 006-005-00-4	<1.0	Acute Tox. 4, H302 Acute Tox. 4, H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317 STOT RE 2, H373 Aquatic Acute 1, H400 (M=10) Aquatic Chronic 1, H410 (M=10)	[1]
Phenol-formaldehyde resin	EC: 500-005-2 CAS: 9003-35-4	≤0.30	,	[1]
2,2'-thiodiethanethiol	EC: 222-671-0 CAS: 3570-55-6	≤0.30	Acute Tox. 3, H301 Acute Tox. 4, H312 Acute Tox. 4, H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317 STOT SE 3, H335	[1]
			See Section 16 for the full text of the H statements declared above.	

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment, are PBTs or vPvBs or have been assigned a workplace exposure limit and hence require reporting in this section.

Type

- [1] Substance classified with a health or environmental hazard
- [2] Substance with a workplace exposure limit
- [3] Substance meets the criteria for PBT according to Regulation (EC) No. 1907/2006, Annex XIII
- [4] Substance meets the criteria for vPvB according to Regulation (EC) No. 1907/2006, Annex XIII
- [5] Substance of equivalent concern
- [6] Additional disclosure due to company policy

Occupational exposure limits, if available, are listed in Section 8.

SUB codes represent substances without registered CAS Numbers.

English (GB)	United Kingdom (UK)	2/40
g(02)	omica ranguom (orc)	3/16

Code

: PR1776B2AS-F Base

Date of issue/Date of revision

: 5 April 2018

PR1776B2AS-F Base

SECTION 4: First aid measures

4.1 Description of first aid measures

Eye contact : Remove contact lenses, irrigate copiously with clean, fresh water, holding the eyelids

apart for at least 10 minutes and seek immediate medical advice.

: Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is Inhalation

irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by

trained personnel.

Skin contact : Remove contaminated clothing and shoes. Wash skin thoroughly with soap and

water or use recognised skin cleanser. Do NOT use solvents or thinners.

Ingestion : If swallowed, seek medical advice immediately and show the container or label. Keep

person warm and at rest. Do NOT induce vomiting.

: No action shall be taken involving any personal risk or without suitable training. It Protection of first-aiders

may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

4.2 Most important symptoms and effects, both acute and delayed

Potential acute health effects

: No known significant effects or critical hazards. Eve contact

Inhalation : No known significant effects or critical hazards.

Skin contact : Defatting to the skin. May cause skin dryness and irritation.

Ingestion : No known significant effects or critical hazards.

Over-exposure signs/symptoms

Eve contact : No specific data.

Inhalation : No specific data.

Skin contact : Adverse symptoms may include the following:

irritation dryness cracking

Ingestion : No specific data.

4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician : Treat symptomatically. Contact poison treatment specialist immediately if large

quantities have been ingested or inhaled.

Specific treatments : No specific treatment.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing

media

: Use an extinguishing agent suitable for the surrounding fire.

Unsuitable extinguishing

media

: None known.

5.2 Special hazards arising from the substance or mixture

Hazards from the substance or mixture : This material is toxic to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any

waterway, sewer or drain.

Code : PR1776B2AS-F Base

Date of issue/Date of revision

: 5 April 2018

PR1776B2AS-F Base

SECTION 5: Firefighting measures

Hazardous combustion products

: Decomposition products may include the following materials:

carbon oxides sulfur oxides

halogenated compounds metal oxide/oxides Formaldehyde.

5.3 Advice for firefighters

fighters

Special precautions for fire- : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable

training.

Special protective equipment for fire-fighters : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency

personnel

: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders : If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

6.2 Environmental precautions

: Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities. Collect spillage.

6.3 Methods and material for containment and cleaning up

Small spill

: Move containers from spill area. Vacuum or sweep up material and place in a designated, labelled waste container. Dispose of via a licensed waste disposal contractor.

Large spill

: Move containers from spill area. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Vacuum or sweep up material and place in a designated, labelled waste container. Dispose of via a licensed waste disposal contractor.

6.4 Reference to other

sections

See Section 1 for emergency contact information.

See Section 8 for information on appropriate personal protective equipment.

See Section 13 for additional waste treatment information.

SECTION 7: Handling and storage

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

7.1 Precautions for safe handling

English (GB)	United Kingdom (UK)	5/16

Code : PR1776B2AS-F Base Date of issue/Date of revision : 5 April 2018

PR1776B2AS-F Base

SECTION 7: Handling and storage

Protective measures : Put on appropri

: Put on appropriate personal protective equipment (see Section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. Do not ingest. Avoid contact with eyes, skin and clothing. Avoid release to the environment. Refer to special instructions/safety data sheet. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

Advice on general occupational hygiene

: Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

7.2 Conditions for safe storage, including any incompatibilities

: Storage temperature: 4 to 27°C (39.2 to 80.6°F). Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

7.3 Specific end use(s)

See Section 1.2 for Identified uses.

SECTION 8: Exposure controls/personal protection

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

8.1 Control parameters

Occupational exposure limits

Product/ingredient name	Exposure limit values		
ethyl acetate	EH40/2005 WELs (United Kingdom (UK), 12/2011). STEL: 400 ppm 15 minutes. TWA: 200 ppm 8 hours.		
titanium dioxide	EH40/2005 WELs (United Kingdom (UK), 12/2011). TWA: 10 mg/m³ 8 hours. Form: inhalable dust TWA: 4 mg/m³ 8 hours. Form: respirable dust		

Recommended monitoring procedures

: If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

English (GB)	United Kingdom (UK)	6/16

: 5 April 2018

: PR1776B2AS-F Base

Date of issue/Date of revision

PR1776B2AS-F Base

SECTION 8: Exposure controls/personal protection

DNELs

Product/ingredient name	Type	Exposure	Value	Population	Effects
calcium carbonate	DNEL	Long term Inhalation	10 mg/m ³	Workers	Systemic
	DNEL	Long term Inhalation	10 mg/m³	Consumers	Systemic
	DNEL	Long term Inhalation	4.26 mg/m ³	Workers	Local
	DNEL	Long term Inhalation	1.06 mg/m³	Consumers	Local
	DNEL	Long term Oral	6.1 mg/kg bw/day	Consumers	Systemic
ethyl acetate	DNEL	Short term Inhalation	1468 mg/ m³	Workers	Systemic
	DNEL	Short term Inhalation	1468 mg/ m³	Workers	Local
	DNEL	Long term Inhalation	734 mg/m³	Workers	Systemic
	DNEL	Long term Inhalation	734 mg/m³	Workers	Local
	DNEL	Long term Dermal	63 mg/kg bw/day	Workers	Systemic
	DNEL	Short term Inhalation	734 mg/m³	Consumers	Systemic
	DNEL	Short term Inhalation	734 mg/m³	Consumers	Local
	DNEL	Long term Inhalation	367 mg/m³	Consumers	Local
	DNEL	Long term Inhalation	367 mg/m³	Consumers	Systemic
	DNEL	Long term Dermal	37 mg/kg bw/day	Consumers	Systemic
	DNEL	Long term Oral	4.5 mg/kg bw/day	Consumers	Systemic

PNECs

Product/ingredient name	Type	Compartment Detail	Value	Method Detail
calcium carbonate	-	Sewage Treatment Plant	100 mg/l	Assessment Factors
ethyl acetate	-	Fresh water Marine water Sewage Treatment Plant	0.24 mg/l 0.024 mg/l 650 mg/l	Assessment Factors Assessment Factors Assessment Factors
	-	Fresh water sediment Marine water sediment Soil	1.15 mg/kg dwt 0.115 mg/kg dwt 0.148 mg/kg dwt	-

8.2 Exposure controls

Appropriate engineering controls

: Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

Individual protection measures

English (GB)	United Kingdom (UK)	7/16

: PR1776B2AS-F Base

Date of issue/Date of revision

: 5 April 2018

PR1776B2AS-F Base

SECTION 8: Exposure controls/personal protection

Hygiene measures

: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection Skin protection Hand protection

: Chemical splash goggles. Use eye protection according to EN 166.

: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated. When prolonged or frequently repeated contact may occur, a glove with a protection class of 6 (breakthrough time greater than 480 minutes according to EN 374) is recommended. When only brief contact is expected, a glove with a protection class of 2 or higher (breakthrough time greater than 30 minutes according to EN 374) is

recommended.

Gloves

: For prolonged or repeated handling, use the following type of gloves:

Recommended: natural rubber (latex), butyl rubber

Body protection

: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Other skin protection

Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection

: Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. If workers are exposed to concentrations above the exposure limit, they must use appropriate, certified respirators. Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Wear a respirator conforming to EN140.

Environmental exposure controls

: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance

Physical state : Solid. Colour : Grey.

Odour : Sulphurous. : Not available. Odour threshold : insoluble in water.

Melting point/freezing point Initial boiling point and boiling

: Not available. : Not available.

range

Flash point : Closed cup: Not applicable.

> English (GB) United Kingdom (UK) 8/16

Code : PR1776B2AS-F Base Date of issue/Date of revision

: 5 April 2018

PR1776B2AS-F Base

SECTION 9: Physical and chemical properties

Evaporation rate

: Not available.

Material supports combustion.

: Yes.

Flammability (solid, gas)

Upper/lower flammability or

: Not available. : Not available.

explosive limits

: 1.17

Relative density Solubility(ies)

: Insoluble in the following materials: cold water.

Partition coefficient: n-octanol/ : Not applicable.

Auto-ignition temperature

: Not available.

Decomposition temperature

: Stable under recommended storage and handling conditions (see Section 7).

Viscosity

: Kinematic (40°C): Not applicable.

Explosive properties Oxidising properties

: Product does not present an explosion hazard. : Product does not present an oxidizing hazard.

9.2 Other information

No additional information.

SECTION 10: Stability and reactivity

10.1 Reactivity

: No specific test data related to reactivity available for this product or its ingredients.

10.2 Chemical stability

: The product is stable.

10.3 Possibility of hazardous reactions

: Under normal conditions of storage and use, hazardous reactions will not occur.

10.4 Conditions to avoid

: When exposed to high temperatures may produce hazardous decomposition

products.

Refer to protective measures listed in sections 7 and 8.

10.5 Incompatible materials

: Keep away from the following materials to prevent strong exothermic reactions:

oxidising agents, strong alkalis, strong acids.

10.6 Hazardous

decomposition products

: Depending on conditions, decomposition products may include the following materials: carbon oxides sulfur oxides halogenated compounds Formaldehyde.

metal oxide/oxides

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Code : PR1776B2AS-F Base

Date of issue/Date of revision

: 5 April 2018

PR1776B2AS-F Base

SECTION 11: Toxicological information

Product/ingredient name	Result	Species	Dose	Exposure
Propane, 1,2,3-trichloro-, polymer with 1,1'-[methylenebis(oxy)]bis [2-chloroethane] and sodium sulfide (Na2(Sx)), reduced	LD50 Oral	Rat	>5000 mg/kg	-
calcium carbonate ethyl acetate titanium dioxide thiram (ISO)	LD50 Oral LD50 Dermal LD50 Oral LD50 Oral LC50 Inhalation Dusts and mists LD50 Dermal	Rat Rabbit Rat Rat Rat Rat	6450 mg/kg >5 g/kg 5620 mg/kg >11 g/kg 4420 mg/m³ >5000 mg/kg	- - - - 4 hours
2,2'-thiodiethanethiol	LD50 Oral LC50 Inhalation Dusts and mists LD50 Oral	Rat	560 mg/kg 560 mg/kg 160 mg/m³ 0.164 g/kg	- 4 hours

Conclusion/Summary

: There are no data available on the mixture itself.

Acute toxicity estimates

Route	ATE value	
Oral	109151.4 mg/kg	

Irritation/Corrosion

Conclusion/Summary

Skin : There are no data available on the mixture itself.

Eyes : There are no data available on the mixture itself.

Respiratory : There are no data available on the mixture itself.

Sensitisation

Conclusion/Summary

Skin : There are no data available on the mixture itself.

Respiratory : There are no data available on the mixture itself.

Mutagenicity

Conclusion/Summary : There are no data available on the mixture itself.

Carcinogenicity

Conclusion/Summary : There are no data available on the mixture itself.

Reproductive toxicity

Conclusion/Summary : There are no data available on the mixture itself.

Teratogenicity

Conclusion/Summary : There are no data available on the mixture itself.

Specific target organ toxicity (single exposure)

Product/ingredient name	Category	Route of exposure	Target organs
ethyl acetate		Not applicable.	Narcotic effects
2,2'-thiodiethanethiol		Not applicable.	Respiratory tract irritation

Specific target organ toxicity (repeated exposure)

Product/ingredient name	Category	Route of exposure	Target organs
thiram (ISO)	Category 2	Not determined	Not determined

Aspiration hazard

Not available.

English (GB)	United Kingdom (UK)	10/16
--------------	---------------------	-------

Code : PR1776B2AS-F Base Date of iss

PR1776B2AS-F Base

Date of issue/Date of revision : 5 April 2018

SECTION 11: Toxicological information

Information on likely

: Not available.

routes of exposure

Potential acute health effects

Inhalation : No known significant effects or critical hazards.Ingestion : No known significant effects or critical hazards.

Skin contact : Defatting to the skin. May cause skin dryness and irritation.

Eye contact : No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Inhalation : No specific data.
Ingestion : No specific data.

Skin contact : Adverse symptoms may include the following:

irritation dryness cracking

Eye contact : No specific data.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Short term exposure

Potential immediate

: Not available.

effects

Potential delayed effects: Not available.

Long term exposure

Potential immediate

: Not available.

effects

Potential delayed effects : Not available.

Potential chronic health effects

Not available.

Conclusion/Summary : Not available.

General : Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/

or dermatitis.

Carcinogenicity: No known significant effects or critical hazards.

Mutagenicity: No known significant effects or critical hazards.

Teratogenicity: No known significant effects or critical hazards.

Developmental effects: No known significant effects or critical hazards.

Fertility effects: No known significant effects or critical hazards.

Other information : Not available.

There are no data available on the mixture itself. The mixture has been assessed following the conventional method of the CLP Regulation (EC) No 1272/2008 and is classified for toxicological properties accordingly. See Sections 2 and 3 for details.

Exposure to component solvent vapour concentrations in excess of the stated occupational exposure limit may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, loss of consciousness.

Solvents may cause some of the above effects by absorption through the skin. Repeated or prolonged contact with the mixture may cause removal of natural fat from the skin, resulting in non-allergic contact dermatitis and absorption through the skin.

If splashed in the eyes, the liquid may cause irritation and reversible damage.

Ingestion may cause nausea, diarrhea and vomiting.

This takes into account, where known, delayed and immediate effects and also chronic effects of components from

English (GB) United Kingdom (UK) 11/16

Code : PR1776B2AS-F Base

PR1776B2AS-F Base

Date of issue/Date of revision

: 5 April 2018

SECTION 11: Toxicological information

short-term and long-term exposure by oral, inhalation and dermal routes of exposure and eye contact.

Contains thiram (ISO), Phenol-formaldehyde resin, 2,2'-thiodiethanethiol. May produce an allergic reaction.

SECTION 12: Ecological information

12.1 Toxicity

Product/ingredient name	Result	Species	Exposure
Propane, 1,2,3-trichloro-, polymer with 1,1'- [methylenebis(oxy)]bis[2-chloroethane] and sodium sulfide (Na2(Sx)), reduced	Acute EC50 20 mg/l	Daphnia	48 hours
titanium dioxide	Acute LC50 >100 mg/l Fresh water	Daphnia - Daphnia magna	48 hours
thiram (ISO)	Acute EC50 0.04 mg/l Marine water	Algae - Nannochloropsis oculata	72 hours
	Acute LC50 0.02 mg/l Marine water	Crustaceans - Artemia franciscana - Nauplii	48 hours
	Acute LC50 0.01 mg/l Fresh water	Daphnia - Daphnia magna - Neonate	48 hours

Conclusion/Summary

: There are no data available on the mixture itself.

12.2 Persistence and degradability

Conclusion/Summary

: There are no data available on the mixture itself.

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
Propane, 1,2,3-trichloro-, polymer with 1,1'- [methylenebis(oxy)]bis[2-chloroethane] and sodium sulfide (Na2(Sx)), reduced	-	-	Not readily

12.3 Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
ethyl acetate	0.73	-	low
thiram (ISO)	1.73	3.39	low

12.4 Mobility in soil

Soil/water partition coefficient (Koc)

: Not available.

Mobility

: Not available.

12.5 Results of PBT and vPvB assessment

PBT

: Not applicable.

vPvB

: Not applicable.

12.6 Other adverse effects

: No known significant effects or critical hazards.

English (GB)	United Kingdom (UK)	12/16

Code : PR1776B2AS-F Base

Date of issue/Date of revision

: 5 April 2018

PR1776B2AS-F Base

SECTION 13: Disposal considerations

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

13.1 Waste treatment methods

Product

Methods of disposal

: The generation of waste should be avoided or minimised wherever possible.

Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction.

Hazardous waste

Yes.

European waste catalogue (EWC)

Waste code	Waste designation
08 04 09*	waste adhesives and sealants containing organic solvents or other hazardous substances

Packaging

Methods of disposal

: The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

Special precautions

: This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

14. Transport information

	ADR/RID	ADN	IMDG	IATA
14.1 UN number	UN3077	UN3077	UN3077	UN3077
14.2 UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (thiram (ISO))			
14.3 Transport hazard class(es)	9	9	9	9
14.4 Packing group	[1]	111	III	III
14.5 Environmental hazards	Yes.	Yes.	Yes.	Yes.
Marine pollutant substances	Not applicable.	Not applicable.	(thiram (ISO))	Not applicable.

Additional information

ADR/RID

: This product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8.

ADN

: This product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8.

IMDG

: This product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8.

United Kingdom (UK)	13/16
	United Kingdom (UK)

Code : PR1776B2AS-F Base Date of issue/Date of revision

: 5 April 2018

PR1776B2AS-F Base

14. Transport information

IATA

: This product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤5 kg. provided the packagings meet the general provisions of 5.0.2.4.1, 5.0.2.6.1.1 and 5.0.2.8.

user

14.6 Special precautions for : Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in

the event of an accident or spillage.

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code

: Not applicable.

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

EU Regulation (EC) No. 1907/2006 (REACH)

Annex XIV - List of substances subject to authorisation

Annex XIV

None of the components are listed.

Substances of very high concern

None of the components are listed.

Annex XVII - Restrictions : Not applicable.

on the manufacture,

placing on the market and

use of certain dangerous substances, mixtures and

articles

Other EU regulations

Ozone depleting substances (1005/2009/EU)

Not listed.

Seveso Directive

This product is controlled under the Seveso Directive.

Danger criteria

Category

F2

15.2 Chemical safety assessment

: No Chemical Safety Assessment has been carried out.

SECTION 16: Other information

 ${\Bbb V}$ Indicates information that has changed from previously issued version.

Abbreviations and acronyms

ATE = Acute Toxicity Estimate

CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]

DNEL = Derived No Effect Level

EUH statement = CLP-specific Hazard statement

PNEC = Predicted No Effect Concentration

RRN = REACH Registration Number

PBT = Persistent, Bioaccumulative and Toxic

vPvB = Very Persistent and Very Bioaccumulative

ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road

English (GB)

United Kingdom (UK)

14/16

Code : PR1776B2AS-F Base

PR1776B2AS-F Base

Date of issue/Date of revision

: 5 April 2018

SECTION 16: Other information

ADN = European Provisions concerning the International Carriage of Dangerous Goods by Inland Waterway IMDG = International Maritime Dangerous Goods

IATA = International Air Transport Association

Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Classification	Justification	
Aquatic Chronic 2, H411	Calculation method	

Full text of abbreviated H statements

H225	Highly flammable liquid and vapour.
H301	Toxic if swallowed.
H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H332	Harmful if inhaled,
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H373	May cause damage to organs through prolonged or repeated
	exposure.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

Full text of classifications [CLP/GHS]

Acute Tox. 3, H301	ACUTE TOXICITY (oral) - Category 3
Acute Tox. 4, H302	ACUTE TOXICITY (oral) - Category 4
Acute Tox. 4, H312	ACUTE TOXICITY (dermal) - Category 4
Acute Tox. 4, H332	ACUTE TOXICITY (inhalation) - Category 4
Aquatic Acute 1, H400	SHORT-TERM (ACUTE) AQUATIC HAZARD - Category 1
Aquatic Chronic 1, H410	LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 1
Aquatic Chronic 2, H411	LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 2
Aquatic Chronic 3, H412	LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 3
EUH066	Repeated exposure may cause skin dryness or cracking.
Eye Irrit. 2, H319	SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2
Flam. Liq. 2, H225	FLAMMABLE LIQUIDS - Category 2
Skin Irrit. 2, H315	SKIN CORROSION/IRRITATION - Category 2
Skin Sens. 1, H317	SKIN SENSITISATION - Category 1
STOT RE 2, H373	SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE
	- Category 2
STOT SE 3, H335	SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE
***	(Respiratory tract irritation) - Category 3
STOT SE 3, H336	SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE
Section Control Contro	(Narcotic effects) - Category 3
L	1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1

History

Date of issue/ Date of

: 5 April 2018

revision

Date of previous issue

: 20 December 2017

Prepared by Version : EHS : 1.02

Disclaimer

United Kingdom (UK)	15/16
	United Kingdom (UK)

Code : PR1776B2AS-F Base Date of issue/Date of revision : 5 April 2018

PR1776B2AS-F Base

SECTION 16: Other information

The information contained in this data sheet is based on present scientific and technical knowledge. The purpose of this information is to draw attention to the health and safety aspects concerning the products supplied by us, and to recommend precautionary measures for the storage and handling of the products. No warranty or guarantee is given in respect of the properties of the products. No liability can be accepted for any failure to observe the precautionary measures described in this data sheet or for any misuse of the products.

SAFETY DATA SHEET

Date of issue/Date of revision

: 20 December 2017 Version

: 1.01



SECTION 1: Identification of the substance/mixture and of the company/ undertaking

1.1 Product identifier

Product name : PR1776B2-F Accelerator Product code : PR1776B2-F Accelerator

Other means of identification

: Not available.

1.2 Relevant identified uses of the substance or mixture and uses advised against

Product use : Industrial applications.

Use of the substance/

: Catalyst.

mixture

1.3 Details of the supplier of the safety data sheet

Sealants Europe SAS 84 rue Salvador Allende 95870 Bezons France

+33 (0) 1 34 23 38 00

PPG Deutschland Sales & Services GmbH Hein-Sass-Weg 29 D-21129 Hamburg-Finkenwerder Germany +49 (40) 742 193 10

PPG Coatings S.A. 7, Allée de la Plaine Gonfreville l'Orcher 76700 HARFLEUR France +33 (0)2 3553 5400

e-mail address of person responsible for this SDS

: AeroPSreachEMEA@ppg.com

1.4 Emergency telephone number

Supplier

Telephone number F44 (0) 1388 772 541

: PR1776B2-F Accelerator

Date of issue/Date of revision

: 20 December 2017

PR1776B2-F Accelerator

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Product definition : Mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Acute Tox. 4, H302 Acute Tox. 4, H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319 **STOT RE 2, H373**

Aquatic Chronic 2, H411

The product is classified as hazardous according to Regulation (EC) 1272/2008 as amended.

See Section 16 for the full text of the H statements declared above.

See Section 11 for more detailed information on health effects and symptoms.

2.2 Label elements

Hazard pictograms







Signal word : Warning

Hazard statements : Harmful if swallowed or if inhaled.

> Causes serious eve irritation. Causes skin irritation.

May cause damage to organs through prolonged or repeated exposure.

Toxic to aquatic life with long lasting effects.

Precautionary statements

Prevention : Wear protective gloves. Wear eye or face protection. Do not breathe vapour.

: IF INHALED: Remove person to fresh air and keep comfortable for breathing. IF IN Response

EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if

present and easy to do. Continue rinsing.

Storage : Not applicable. Disposal : Not applicable.

P280, P260, P304 + P340, P305 + P351 + P338

Hazardous ingredients

Supplemental label

: manganese dioxide

elements

: Not applicable.

Annex XVII - Restrictions on the manufacture. placing on the market and use of certain dangerous substances, mixtures and

articles

: Not applicable.

Special packaging requirements

Containers to be fitted

: Not applicable.

with child-resistant fastenings

Tactile warning of danger : Not applicable.

2.3 Other hazards

English (GB)	United Kingdom (UK)	2/15
	(o)	2/10

Code : PR1776B2-F Accelerator

Date of issue/Date of revision

: 20 December 2017

PR1776B2-F Accelerator

SECTION 2: Hazards identification

Other hazards which do not result in classification

: Prolonged or repeated contact may dry skin and cause irritation.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

: Mixture

			Classification	
Product/ingredient name	Identifiers	% by weight	Regulation (EC) No. 1272/2008 [CLP]	Туре
manganese dioxide	REACH #: 01-2119452801-43 EC: 215-202-6 CAS: 1313-13-9 Index: 025-001-00-3	≥25 - ≤50	Acute Tox. 4, H302 Acute Tox. 4, H332 STOT RE 2, H373 (brain) (inhalation)	[1] [2]
Terphenyl, hydrogenated	EC: 262-967-7 CAS: 61788-32-7	≥25 - ≤50	Aquatic Chronic 4, H413	[1] [2]
bis(piperidinothiocarbonyl) hexasulphide	REACH #: 01-2119974270-39 EC: 213-537-2 CAS: 971-15-3	≥1.0 - ≤5.0	Aquatic Chronic 4, H413	[1]
terphenyl	REACH #: 01-2119488220-43 EC: 247-477-3 CAS: 26140-60-3	≥0.30 - <2.5	Aquatic Acute 1, H400 (M=10) Aquatic Chronic 1, H410 (M=10)	[1]
sodium hydroxide	REACH #: 01-2119457892-27 EC: 215-185-5 CAS: 1310-73-2 Index: 011-002-00-6	≤1.0	DECOMPOSE THE TRANSPORT OF THE PROPERTY AND THE PROPERTY	[1] [2]
Poly(oxy-1,2-ethanediyl), α -[(1,1,3, 3-tetramethylbutyl)phenyl]- ω -hydroxy-	CAS: 9036-19-5	<1.0	Acute Tox. 4, H302 Eye Dam. 1, H318 Aquatic Chronic 2, H411	[1] [5]
			See Section 16 for the full text of the H statements declared above.	

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment, are PBTs or vPvBs or have been assigned a workplace exposure limit and hence require reporting in this section.

Type

- [1] Substance classified with a health or environmental hazard
- [2] Substance with a workplace exposure limit
- [3] Substance meets the criteria for PBT according to Regulation (EC) No. 1907/2006, Annex XIII
- [4] Substance meets the criteria for vPvB according to Regulation (EC) No. 1907/2006, Annex XIII
- [5] Substance of equivalent concern
- [6] Additional disclosure due to company policy

Occupational exposure limits, if available, are listed in Section 8.

SUB codes represent substances without registered CAS Numbers.

SECTION 4: First aid measures

4.1 Description of first aid measures

Eye contact

: Remove contact lenses, irrigate copiously with clean, fresh water, holding the eyelids apart for at least 10 minutes and seek immediate medical advice.

Inhalation

: Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel.

United Kingdom (UK)	3/15
	United Kingdom (UK)

Code : PR1776B2-F Accelerator

Date of issue/Date of revision

: 20 December 2017

PR1776B2-F Accelerator

SECTION 4: First aid measures

Skin contact

: Remove contaminated clothing and shoes. Wash skin thoroughly with soap and

water or use recognised skin cleanser. Do NOT use solvents or thinners.

Ingestion : If swallowed, seek medical advice immediately and show the container or label. Keep person warm and at rest. Do NOT induce vomiting.

Protection of first-aiders : No action shall be taken involving any personal risk or without suitable training. If it is

suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing

aid to give mouth-to-mouth resuscitation.

4.2 Most important symptoms and effects, both acute and delayed

Potential acute health effects

Eye contact : Causes serious eye irritation.

Inhalation : Harmful if inhaled.

Skin contact : Causes skin irritation. Defatting to the skin.

Ingestion : Harmful if swallowed.

Over-exposure signs/symptoms

Eye contact : Adverse symptoms may include the following:

pain or irritation watering redness

Inhalation : No specific data.

Skin contact : Adverse symptoms may include the following:

irritation redness dryness cracking

Ingestion : No specific data.

4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician : In case of inhalation of decomposition products in a fire, symptoms may be delayed.

The exposed person may need to be kept under medical surveillance for 48 hours.

Specific treatments : No specific treatment.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing

media

: Use an extinguishing agent suitable for the surrounding fire.

Unsuitable extinguishing

media

: None known.

5.2 Special hazards arising from the substance or mixture

Hazards from the substance or mixture

: In a fire or if heated, a pressure increase will occur and the container may burst. This material is toxic to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any

waterway, sewer or drain.

Hazardous combustion

products

: Decomposition products may include the following materials:

carbon oxides nitrogen oxides sulfur oxides metal oxide/oxides

English (GB)

United Kingdom (UK)

4/15

: PR1776B2-F Accelerator

Date of issue/Date of revision

: 20 December 2017

PR1776B2-F Accelerator

SECTION 5: Firefighting measures

5.3 Advice for firefighters

fighters

Special precautions for fire- : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable

training.

Special protective equipment for fire-fighters : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Avoid breathing vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders

If specialised clothing is required to deal with the spillage, take note of any : information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

6.2 Environmental precautions

: Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities. Collect spillage.

6.3 Methods and material for containment and cleaning up

Small spill

: Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Large spill

: Stop leak if without risk. Move containers from spill area. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilt product.

6.4 Reference to other

sections

: See Section 1 for emergency contact information.

See Section 8 for information on appropriate personal protective equipment.

See Section 13 for additional waste treatment information.

SECTION 7: Handling and storage

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

7.1 Precautions for safe handling

English (GB)	United Kingdom (UK)	5/15

Code : PR1776B2-PR1776B2-F Accelerator

: PR1776B2-F Accelerator

Date of issue/Date of revision

: 20 December 2017

SECTION 7: Handling and storage

Protective measures

: Put on appropriate personal protective equipment (see Section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapour or mist. Avoid release to the environment. Refer to special instructions/safety data sheet. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

Advice on general occupational hygiene

: Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

7.2 Conditions for safe storage, including any incompatibilities

: Storage temperature: 4 to 27°C (39.2 to 80.6°F). Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

7.3 Specific end use(s)

See Section 1.2 for Identified uses.

SECTION 8: Exposure controls/personal protection

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

8.1 Control parameters

Occupational exposure limits

Product/ingredient name	Exposure limit values
manganese dioxide	EH40/2005 WELs (United Kingdom (UK), 12/2011).
	TWA: 0.5 mg/m³, (as Mn) 8 hours.
Terphenyl, hydrogenated	EU OEL (Europe, 12/2017).
	STEL: 5 ppm 15 minutes.
	STEL: 48 mg/m³ 15 minutes.
	TWA: 2 ppm 8 hours.
	TWA: 19 mg/m³ 8 hours.
sodium hydroxide	EH40/2005 WELs (United Kingdom (UK), 12/2011).
-	STEL: 2 mg/m³ 15 minutes.

Recommended monitoring procedures

: If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of

English (GB)	United Kingdom (UK)	6/15
		1

Code : PR1776B2-F Accelerator Date of issue/Date of revision

: 20 December 2017

PR1776B2-F Accelerator

SECTION 8: Exposure controls/personal protection

exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

DNELs

Product/ingredient name	Туре	Exposure	Value	Population	Effects
sodium hydroxide	DNEL	Long term Inhalation	1 mg/m³	Workers	Local
	DNEL	Long term Inhalation	1 mg/m³	Consumers	Local

PNECs

PNECs - Not available.

8.2 Exposure controls

Appropriate engineering controls

: Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

Individual protection measures

Hygiene measures

: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection Skin protection Hand protection

: Safety glasses with side shields. Use eye protection according to EN 166.

: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated. When prolonged or frequently repeated contact may occur, a glove with a protection class of 6 (breakthrough time greater than 480 minutes according to EN 374) is recommended. When only brief contact is expected, a glove with a protection class of 2 or higher (breakthrough time greater than 30 minutes according to EN 374) is recommended.

Gloves

: nitrile rubber, butyl rubber, PVC, Viton®

Body protection

: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Other skin protection

Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection

: Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. If workers are exposed to concentrations above the exposure limit, they must use appropriate, certified respirators. Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Wear a respirator conforming to EN140. Filter type: organic vapour (Type A) and particulate filter P3

English	ICD'
English	(GD

Code : PR1776B2-F Accelerator Date of issue/Date of revision

: 20 December 2017

PR1776B2-F Accelerator

SECTION 8: Exposure controls/personal protection

Environmental exposure controls

: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance

Physical state : Liquid. Colour : Black.

Odour : Characteristic. : Not available. Odour threshold Hq : insoluble in water.

Melting point/freezing point

: May start to solidify at the following temperature: 0°C (32°F) This is based on data for the following ingredient: water. Weighted average: -21.91°C (-7.4°F)

Initial boiling point and boiling

range

: >37.78°C

: Closed cup: 114°C Flash point

Evaporation rate : Not available.

Material supports combustion. : Yes. Flammability (solid, gas) : liquid

Upper/lower flammability or

explosive limits Vapour pressure : Not available.

: Highest known value: 3.2 kPa (23.8 mm Hg) (at 20°C) (water). Weighted

average: 0.28 kPa (2.1 mm Hg) (at 20°C)

: Highest known value: 7.95 (Air = 1) (Terphenyl, hydrogenated). Vapour density

Relative density

Solubility(ies) : Insoluble in the following materials: cold water.

Partition coefficient: n-octanol/ : Not applicable.

water

: Lowest known value: 374°C (705.2°F) (Terphenyl, hydrogenated). Auto-ignition temperature

Decomposition temperature : Stable under recommended storage and handling conditions (see Section 7). Viscosity : Kinematic (40°C): >0.21 cm²/s

Explosive properties : Product does not present an explosion hazard. Oxidising properties : Product does not present an oxidizing hazard.

9.2 Other information

No additional information.

SECTION 10: Stability and reactivity

: No specific test data related to reactivity available for this product or its ingredients. 10.1 Reactivity

10.2 Chemical stability : The product is stable.

10.3 Possibility of hazardous reactions : Under normal conditions of storage and use, hazardous reactions will not occur.

English (GB)	United Kingdom (UK)	8/15
--------------	---------------------	------

Code : PR1776B2-F Accelerator

Date of issue/Date of revision

: 20 December 2017

PR1776B2-F Accelerator

SECTION 10: Stability and reactivity

10.4 Conditions to avoid

: When exposed to high temperatures may produce hazardous decomposition

products.

Refer to protective measures listed in sections 7 and 8.

10.5 Incompatible materials

: Keep away from the following materials to prevent strong exothermic reactions:

oxidising agents, strong alkalis, strong acids.

10.6 Hazardous

decomposition products

: Depending on conditions, decomposition products may include the following materials: carbon oxides nitrogen oxides sulfur oxides metal oxide/oxides

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
manganese dioxide Terphenyl, hydrogenated terphenyl sodium hydroxide Poly(oxy-1,2-ethanediyl), α-[(1,1,3,3-tetramethylbutyl) phenyl]-ω-hydroxy-	LD50 Oral LD50 Oral LD50 Oral LD50 Oral LD50 Oral	Rat Rat Rat Rat Rat	3478 mg/kg 17500 mg/kg 1400 mg/kg 325 mg/kg 3.5 g/kg	-

Conclusion/Summary

: There are no data available on the mixture itself.

Acute toxicity estimates

Route	ATE value	
Oral Inhalation (dusts and mists)	1218 mg/kg 3.654 mg/l	

Irritation/Corrosion

Conclusion/Summary

Skin : There are no data available on the mixture itself.

Eyes : There are no data available on the mixture itself.

Respiratory : There are no data available on the mixture itself.

Sensitisation

Conclusion/Summary

Skin : There are no data available on the mixture itself.

Respiratory : There are no data available on the mixture itself.

<u>Mutagenicity</u>

Conclusion/Summary : There are no data available on the mixture itself.

Carcinogenicity

Conclusion/Summary : There are no data available on the mixture itself.

Reproductive toxicity

Conclusion/Summary : There are no data available on the mixture itself.

Teratogenicity

Conclusion/Summary : There are no data available on the mixture itself.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

English (GB)	United Kingdom (UK)	9/15
--------------	---------------------	------

Code : PR1776B2-F Accelerator

Date of issue/Date of revision

: 20 December 2017

PR1776B2-F Accelerator

SECTION 11: Toxicological information

Product/ingredient name	Category	Route of exposure	Target organs
manganese dioxide	Category 2	Inhalation	brain

Aspiration hazard

Not available.

Information on likely

: Not available.

routes of exposure

Potential acute health effects

Inhalation : Harmful if inhaled.
Ingestion : Harmful if swallowed.

Skin contact : Causes skin irritation. Defatting to the skin.

Eye contact : Causes serious eye irritation.

Symptoms related to the physical, chemical and toxicological characteristics

Inhalation: No specific data.Ingestion: No specific data.

Skin contact : Adverse symptoms may include the following:

irritation redness dryness cracking

redness

Eye contact : Adverse symptoms may include the following:

pain or irritation watering

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Short term exposure

Potential immediate

: Not available.

effects

Potential delayed effects : Not available.

Long term exposure

Potential immediate

: Not available.

effects

Potential delayed effects : Not available.

Potential chronic health effects

Not available.

Conclusion/Summary : Not available.

General : May cause damage to organs through prolonged or repeated exposure. Prolonged

or repeated contact can defat the skin and lead to irritation, cracking and/or

dermatitis.

Carcinogenicity : No known significant effects or critical hazards.

Mutagenicity : No known significant effects or critical hazards.

Teratogenicity : No known significant effects or critical hazards.

Developmental effects : No known significant effects or critical hazards.

Fertility effects : No known significant effects or critical hazards.

Other information : Not available.

Code : PR1776B2-F Accelerator

Date of issue/Date of revision

: 20 December 2017

PR1776B2-F Accelerator

SECTION 11: Toxicological information

There are no data available on the mixture itself. The mixture has been assessed following the conventional method of the CLP Regulation (EC) No 1272/2008 and is classified for toxicological properties accordingly. See Sections 2 and 3 for details.

Exposure to component solvent vapour concentrations in excess of the stated occupational exposure limit may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, loss of consciousness.

Solvents may cause some of the above effects by absorption through the skin. Repeated or prolonged contact with the mixture may cause removal of natural fat from the skin, resulting in non-allergic contact dermatitis and absorption through the skin.

If splashed in the eyes, the liquid may cause irritation and reversible damage.

Ingestion may cause nausea, diarrhea and vomiting.

This takes into account, where known, delayed and immediate effects and also chronic effects of components from short-term and long-term exposure by oral, inhalation and dermal routes of exposure and eye contact.

SECTION 12: Ecological information

12.1 Toxicity

Product/ingredient name	Result	Species	Exposure
terphenyl	Acute EC50 0.022 mg/l Chronic NOEC 0.00322 mg/l	Daphnia Daphnia	48 hours 72 hours
sodium hydroxide	Acute EC50 40.4 mg/l Fresh water	Daphnia - Ceriodaphnia dubia	48 hours

Conclusion/Summary

: There are no data available on the mixture itself.

12.2 Persistence and degradability

Conclusion/Summary

: Not available.

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
terphenyl	-	-	Not readily

12.3 Bioaccumulative potential

Not available.

12.4 Mobility in soil

Soil/water partition

: Not available.

coefficient (Koc)

Mobility

: Not available.

12.5 Results of PBT and vPvB assessment

PBT : Not applicable. vPvB : Not applicable.

12.6 Other adverse effects : No known significant effects or critical hazards.

English (GB)	United Kingdom (UK)	11/15
--------------	---------------------	-------

Code : PR1776B2-F Accelerator

Date of issue/Date of revision

: 20 December 2017

PR1776B2-F Accelerator

SECTION 13: Disposal considerations

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

13.1 Waste treatment methods

Product

Methods of disposal

: The generation of waste should be avoided or minimised wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction.

Hazardous waste

: Yes.

European waste catalogue (EWC)

Waste code	Waste designation
08 04 09*	waste adhesives and sealants containing organic solvents or other hazardous substances

Packaging

Methods of disposal

: The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

Special precautions

: This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

14. Transport information

	ADR/RID	ADN	IMDG	IATA
14.1 UN number	UN3082	UN3082	UN3082	UN3082
14.2 UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
	(terphenyl)	(terphenyl)	(terphenyl)	(terphenyl)
14.3 Transport hazard class(es)	9	9	9	9
14.4 Packing group	111	Ш	III	III
14.5 Environmental hazards	Yes.	Yes.	Yes.	Yes.
Marine pollutant substances	Not applicable.	Not applicable.	(terphenyl)	Not applicable.

Additional information

ADR/RID

: This product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8.

ADN

: This product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8.

IMDG

: This product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8.

English (GB)	United Kingdom (UK)	12/15
--------------	---------------------	-------

: PR1776B2-F Accelerator

PR1776B2-F Accelerator

Date of issue/Date of revision

: 20 December 2017

14. Transport information

IATA

: This product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of 5.0.2.4.1, 5.0.2.6.1.1 and 5.0.2.8.

user

14.6 Special precautions for : Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in

the event of an accident or spillage.

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code : Not applicable.

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture EU Regulation (EC) No. 1907/2006 (REACH)

Annex XIV - List of substances subject to authorisation

Annex XIV

None of the components are listed.

Substances of very high concern

Ingredient name	Intrinsic property	Status	Reference number	Date of revision
Poly(oxy-1,2-ethanediyl), α-[(1,1,3,3-tetramethylbutyl)phenyl]-ω-hydroxy-	Substance of equivalent concern for environment	Recommended	ED/169/2012	2/10/2014

Annex XVII - Restrictions

: Not applicable.

on the manufacture. placing on the market and use of certain dangerous substances, mixtures and articles

Other EU regulations

Ozone depleting substances (1005/2009/EU)

Not listed.

Seveso Directive

This product is controlled under the Seveso Directive.

Danger criteria

Category

E2: Hazardous to the aquatic environment - Chronic 2

9ii: Toxic for the environment

15.2 Chemical safety assessment

: No Chemical Safety Assessment has been carried out.

English (GB)	United Kingdom (UK)	13/15

Code : PR1776B2-F Accelerator

Date of issue/Date of revision

: 20 December 2017

PR1776B2-F Accelerator

SECTION 16: Other information

Indicates information that has changed from previously issued version.

Abbreviations and acronyms

ATE = Acute Toxicity Estimate

CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]

DNEL = Derived No Effect Level

EUH statement = CLP-specific Hazard statement

PNEC = Predicted No Effect Concentration

RRN = REACH Registration Number

PBT = Persistent, Bioaccumulative and Toxic

vPvB = Very Persistent and Very Bioaccumulative

ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road

ADN = European Provisions concerning the International Carriage of Dangerous Goods by Inland Waterway

IMDG = International Maritime Dangerous Goods

IATA = International Air Transport Association

Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Classification	Justification	
Acute Tox. 4, H302 Acute Tox. 4, H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT RE 2, H373 Aquatic Chronic 2, H411	Calculation method	

Full text of abbreviated H statements

H302	Harmful if swallowed.	
H314	Causes severe skin burns and eye damage.	
H315	Causes skin irritation.	
H318	Causes serious eye damage.	
H319	Causes serious eye irritation.	
H332	Harmful if inhaled.	
H373 (inhalation)	May cause damage to organs through prolonged or repeated exposure if inhaled.	
H373	May cause damage to organs through prolonged or repeated exposure.	
H400	Very toxic to aquatic life.	
H410	Very toxic to aquatic life with long lasting effects.	
H411	Toxic to aquatic life with long lasting effects.	
H413	May cause long lasting harmful effects to aquatic life.	

Full text of classifications [CLP/GHS]

ACUTE TOXICITY (oral) - Category 4
ACUTE TOXICITY (inhalation) - Category 4
SHORT-TERM (ACUTE) AQUATIC HAZARD - Category 1
LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 1
LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 2
LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 4
SERIOUS EYE DAMAGE/EYE IRRITATION - Category 1
SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2
SKIN CORROSION/IRRITATION - Category 1A
SKIN CORROSION/IRRITATION - Category 2
SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE
(inhalation) - Category 2
SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE
- Category 2

English (GB)	United Kingdom (UK)	14/15

: PR1776B2-F Accelerator

Date of issue/Date of revision

: 20 December 2017

PR1776B2-F Accelerator

SECTION 16: Other information

History

Date of issue/ Date of

: 20 December 2017

revision

Date of previous issue

: 3 November 2017

Prepared by

: EHS

Version

: 1.01

Disclaimer

The information contained in this data sheet is based on present scientific and technical knowledge. The purpose of this information is to draw attention to the health and safety aspects concerning the products supplied by us, and to recommend precautionary measures for the storage and handling of the products. No warranty or guarantee is given in respect of the properties of the products. No liability can be accepted for any failure to observe the precautionary measures described in this data sheet or for any misuse of the products.