Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Regulation (EU) No. 2015/830. - United Kingdom (UK)

SAFETY DATA SHEET

Intertherm 228HS Part B

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

1.1 Product identifier

: Intertherm 228HS Part B

Product name Product code

: HTA545

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

Identified uses		
Professional application of coatings and inks		
Uses advised against	Reason	
All Other Uses		

1.3 Details of the supplier of the safety data sheet

International Farg AB Holmedalen 3 Aspereds Industriomrade SE-424 22 Angered Sweden

Tel: +46 (0) 31 928500 Fax: +46 (0) 31 928530

e-mail address of person : sdsfellinguk@akzonobel.com responsible for this SDS

National contact

1.4 Emergency telephone number

National advisory body/Poison Centre (For use only by licensed medical professionals.)				
Telephone number	: +44 (0)344 892 0111 (UK)	+353 (0)1 809 2566 (Eire)		
<u>Supplier</u>				
Telephone number	: +46 8 33 12 31			

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]

Flam. Liq. 3, H226 Acute Tox. 4, H302 Skin Corr. 1B, H314 Skin Sens. 1, H317 STOT SE 3, H335 STOT SE 3, H336 STOT RE 2, H373 Aquatic Chronic 3, H412 The product is classified as hazardous according to Regulation (EC) 1272/2008 as amended.

12/09/2019

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.



SECTION 2: Hazards identification

2.2 Label elements	
Hazard pictograms	
Signal word	: Danger
Hazard statements	: Flammable liquid and vapour.
	Harmful if swallowed. Causes severe skin burns and eye damage. May cause an allergic skin reaction. May cause respiratory irritation.
	May cause drowsiness or dizziness. May cause damage to organs through prolonged or repeated exposure. Harmful to aquatic life with long lasting effects.
Precautionary statements	
General	: Not applicable.
Prevention	: Wear protective gloves. Wear eye or face protection. Wear protective clothing. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use only outdoors or in a well-ventilated area. Avoid release to the environment. Do not breathe vapour. Do not eat, drink or smoke when using this product.
Response	: IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or physician. IF SWALLOWED: Immediately call a POISON CENTER or physician. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. Immediately call a POISON CENTER or physician. IF ON SKIN: Take off contaminated clothing and wash it before reuse. IF IN EYES: Immediately call a POISON CENTER or physician.
Storage	: Keep cool.
Disposal	: Dispose of contents and container in accordance with all local, regional, national and international regulations.
Hazardous ingredients	 Formaldehyde, polymer with benzenamine, hydrogenated butan-1-ol 4,4'-methylenebis(cyclohexylamine) 3,6-diazaoctanethylenediamin
Supplemental label	:
elements	Wear appropriate respirator when ventilation is inadequate.
Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous	: Not applicable.
substances, mixtures and articles	
2.3 Other hazards	: None known.
Other hazards which do not result in classification	





SECTION 3: Composition/information on ingredients

3.2 Mixtures	: Mixture				
Product/ingredient name	Identifiers	% by weight	<u>Classification</u> Regulation (EC) No. 1272/2008 [CLP]	Nota (s)	Туре
Formaldehyde, polymer with benzenamine, hydrogenated	CAS: 135108-88-2	≥25 - ≤50	Acute Tox. 4, H302 Skin Corr. 1C, H314 Skin Sens. 1, H317 STOT RE 2, H373 (oral) Aquatic Chronic 3, H412	-	[1]
butan-1-ol	REACH #: 01-2119484630-38 EC: 200-751-6 CAS: 71-36-3 Index: 603-004-00-6	≥10 - ≤25	Flam. Liq. 3, H226 Acute Tox. 4, H302 Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT SE 3, H335 STOT SE 3, H336	6	[1] [2]
4,4'-methylenebis (cyclohexylamine)	REACH #: 01-2119541673-38 EC: 217-168-8 CAS: 1761-71-3	≥5 - <10	Acute Tox. 4, H302 Skin Corr. 1B, H314 Skin Sens. 1, H317 STOT RE 2, H373 (oral) Aquatic Chronic 2, H411	-	[1]
3, 6-diazaoctanethylenediamin	EC: 203-950-6 CAS: 112-24-3	≤5	Acute Tox. 4, H312 Skin Corr. 1B, H314 Skin Sens. 1, H317 Aquatic Chronic 3, H412 See Section 16 for the full text of the H statements declared above.	-	[1]

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.

<u>Type</u>

[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

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

SECTION 4: First aid measures

4.1 Description of first aid measures

General	 In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and seek medical advice.
Eye contact	 Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Seek immediate medical attention.
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. Seek medical attention.
Skin contact	 Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognised skin cleanser. Seek medical attention if irritation persists. 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.

12/09/2019

:



SECTION 4: First aid measures		
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. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.	
4.2 Most important sympton	ns and effects, both acute and delayed	
Potential acute health effect	<u>its</u>	
Eye contact	: Causes serious eye damage.	
Inhalation	 Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness. May cause respiratory irritation. Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure. 	
Skin contact	: Causes severe burns. May cause an allergic skin reaction.	
Ingestion	: Harmful if swallowed. Can cause central nervous system (CNS) depression. May cause burns to mouth, throat and stomach.	
<u>Over-exposure signs/symp</u>	toms	
Eye contact	: Adverse symptoms may include the following: pain watering redness	
Inhalation	: Adverse symptoms may include the following: respiratory tract irritation coughing nausea or vomiting headache drowsiness/fatigue dizziness/vertigo muscle weakness unconsciousness	
Skin contact	: Adverse symptoms may include the following: pain or irritation redness blistering may occur	
Ingestion	: Adverse symptoms may include the following: stomach pains	
4.3 Indication of any immedi	ate 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: Firefigh	ting measures	
5.1 Extinguishing media		
Suitable extinguishing media	: Use dry chemical, CO ₂ , water spray (fog) or foam.	
Unsuitable extinguishing media	: Do not use water jet.	
5.2 Special hazards arising f	rom the substance or mixture	

Hazards from the substance or mixture : Flammable liquid and vapour. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Runoff to sewer may create fire or explosion hazard. This material is harmful 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.



SECTION 5: Firefighting measures

Hazardous thermal decomposition products	:	Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen oxides
5.3 Advice for firefighters		
Special protective actions for fire-fighters	:	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. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.
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. Shut off all ignition sources. No flares, smoking or flames in hazard area. Do not breathe 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.
6.3 Methods and material for	со	ntainment and cleaning up
Small spill	:	Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. 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. Use spark-proof tools and explosion-proof equipment. 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

Protective measures	: Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Do not get in eyes or on skin or clothing. Do not breathe vapour or mist. Do not ingest. Avoid release to the environment. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. 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

Store in accordance with local regulations. Store in a segregated and approved area. 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. Store locked up. Eliminate all ignition sources. Vapours are heavier than air and may spread along floors. Separate from oxidizing materials. 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.

7.3 Specific end use(s)

Recommendations	: Not available.
Industrial sector specific	: Not available.
solutions	

SECTION 8: Exposure controls/personal protection

The information in this section contains generic advice and guidance. Information is provided based on typical anticipated uses of the product. Additional measures might be required for bulk handling or other uses that could significantly increase worker exposure or environmental releases.

8.1 Control parameters

Occupational exposure limits

Product/ingredient name		Exposure limit values
butan-1-ol		EH40/2005 WELs (United Kingdom (UK), 12/2011). Absorbed through skin. STEL: 154 mg/m ³ 15 minutes. STEL: 50 ppm 15 minutes.
Recommended monitoring : procedures	atmosphere or k of the ventilation protective equip the following: E the assessment limit values and atmospheres - C of exposure to c (Workplace atm for the measure	ontains ingredients with exposure limits, personal, workplace biological monitoring may be required to determine the effectiveness in or other control measures and/or the necessity to use respiratory ment. Reference should be made to monitoring standards, such as suropean Standard EN 689 (Workplace atmospheres - Guidance for to of exposure by inhalation to chemical agents for comparison with measurement strategy) European Standard EN 14042 (Workplace Guide for the application and use of procedures for the assessment chemical and biological agents) European Standard EN 482 nospheres - General requirements for the performance of procedures ement of chemical agents) Reference to national guidance methods for the determination of hazardous substances will also be

12/09/2019



X.International.

SECTION 8: Exposure controls/personal protection

required.

DNELs/DMELs

No DNELs/DMELs available.

PNECs

No PNECs available

8.2 Exposure controls			
Appropriate engineering controls	ventilation or other eng contaminants below an controls also need to ke explosive limits. Use e	e ventilation. Use process enclosures, local exhaust ineering controls to keep worker exposure to airborne by recommended or statutory limits. The engineering eep gas, vapour or dust concentrations below any lower explosion-proof ventilation equipment.	
Individual protection meas			
Hygiene measures	before eating, smoking Appropriate techniques Contaminated work clo	and face thoroughly after handling chemical products, and using the lavatory and at the end of the working period s should be used to remove potentially contaminated clothing othing should not be allowed out of the workplace. Wash before reusing. Ensure that eyewash stations and safety ne workstation location.	
Eye/face protection	assessment indicates t gases or dusts. Use ey against liquid splashes worn, unless the asses	Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists gases or dusts. Use eye protection according to EN 166, designed to protect against liquid splashes. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles and/or face shield. If inhalation hazards exist, a full-face respirator	
Skin protection			
Hand protection	against chemicals and gloves. When prolonge protection class of 6 (b 374) is recommended. protection class of 2 or according to EN 374) is of type of glove selecte into account the particu assessment. NOTICE: and duration of use in a workplace factors such handled, physical requi protection), potential bo specifications provided	gloves classified under Standard EN 374: Protective gloves micro-organisms. Recommended: Viton® or Nitrile ed or frequently repeated contact may occur, a glove with a reakthrough time greater than 480 minutes according to EN When only brief contact is expected, a glove with a higher (breakthrough time greater than 30 minutes s recommended. The user must check that the final choice ed for handling this product is the most appropriate and takes ular conditions of use, as included in the user's risk : The selection of a specific glove for a particular application a workplace should also take into account all relevant n as, but not limited to: Other chemicals which may be irements (cut/puncture protection, dexterity, thermal ody reactions to glove materials, as well as the instructions/ l by the glove supplier. Barrier creams may help to protect he skin but should not be applied once exposure has	
Body protection	being performed and the before handling this pro- static electricity, wear a from static discharges,	uipment for the body should be selected based on the task ne risks involved and should be approved by a specialist oduct.EN ISO 13688 When there is a risk of ignition from anti-static protective clothing. For the greatest protection clothing should include anti-static overalls, boots and gloves ndard EN 1149 for further information on material and desig methods.	
Other skin protection	selected based on the	nd any additional skin protection measures should be task being performed and the risks involved and should be st before handling this product.	
Respiratory protection	standard if a risk asses Respirator selection me hazards of the product	ir-purifying or air-fed respirator complying with an approved sement indicates this is necessary according to EN529. ust be based on known or anticipated exposure levels, the and the safe working limits of the selected respirator. hum) half-face mask APF 10.	
Date of issue/Date of revision	: 12/09/2019	AkzoNobol	



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.

XInternational.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical	a	nd chemical properties
<u>Appearance</u>		
Physical state	:	Liquid.
Colour	:	Brown.
Odour	:	Solvent.
Odour threshold	:	Not available.
рН	:	Not applicable.
Melting point/freezing point	:	Not available.
Initial boiling point and boiling range	:	Lowest known value: 119°C (246.2°F) (butan-1-ol).
Flash point	:	Closed cup: 55°C
Evaporation rate	:	Not available.
Flammability (solid, gas)	:	Not available.
Upper/lower flammability or explosive limits	:	Greatest known range: Lower: 1.4% Upper: 11.3% (butan-1-ol)
Vapour pressure	:	Not available.
Vapour density	:	Not available.
Relative density	:	0.96
Solubility(ies)	:	Soluble in the following materials: cold water.
Partition coefficient: n-octanol/ water	:	Not available.
Auto-ignition temperature	:	Not available.
Decomposition temperature	:	Not available.
Viscosity	:	Kinematic (room temperature): 205.1 mm ² /s
Explosive properties	:	Not available.
Oxidising properties	:	Not available.

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	: Avoid all possible sources of ignition (spark or flame). Do not pressurise, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.		
10.5 Incompatible materials	: Reactive or incompatible with the following materials: oxidizing materials		
10.6 Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.		
Date of issue/Date of revision Version :4	: 12/09/2019 AkzoNobel		



SECTION 10: Stability and reactivity

Product/ingredient name	Result	Species	Dose	Exposure
butan-1-ol	LC50 Inhalation Vapour	Rat	24 mg/l	4 hours
	LD50 Dermal	Rabbit	3400 mg/kg	-
trientine	LD50 Dermal	Rabbit	805 mg/kg	-
	LD50 Oral	Rat	2500 mg/kg	-

Conclusion/Summary : Not available.

Acute toxicity estimates

Route	ATE value
Oral	633.7 mg/kg
Dermal	22449 mg/kg

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation		
butan-1-ol	Eyes - Severe irritant	Rabbit	-	24 hours 2	-		
	Eyes - Severe irritant	Rabbit	-	milligrams 0.005	-		
	Skin - Moderate irritant	Rabbit	-	Mililiters 24 hours 20 milligrams	-		
4,4'-methylenebis (cyclohexylamine)	Eyes - Severe irritant	Rabbit	-	24 hours 10 microliters	-		
trientine	Eyes - Moderate irritant	Rabbit	-	24 hours 20 milligrams	-		
	Eyes - Severe irritant	Rabbit	-	49 milligrams	-		
	Skin - Severe irritant	Rabbit	-	24 hours 5	-		
	Skin - Severe irritant	Rabbit	-	milligrams 490 milligrams	-		
Conclusion/Summary	: Not available.			I			
Sensitisation							
Conclusion/Summary	: Not available.						
Mutagenicity							
Conclusion/Summary	: Not available.						
Carcinogenicity							
Conclusion/Summary	: Not available.						
Reproductive toxicity							
Conclusion/Summary	: Not available.						
Teratogenicity							
Conclusion/Summary	: Not available.						
<u>Specific target organ toxicity (single exposure)</u>							

Product/ingredient name	Category	Route of exposure	Target organs
butan-1-ol	Category 3	Not applicable.	Respiratory tract irritation and Narcotic effects

Specific target organ toxicity (repeated exposure)

Product/ingredient name	Category	Route of exposure	Target organs
Formaldehyde, polymer with benzenamine, hydrogenated 4,4'-methylenebis(cyclohexylamine)	Category 2	Oral	Not determined
	Category 2	Oral	Not determined

Aspiration hazard

Not available.



AkzoNobel

SECTION 11: Toxicological information

Information on likely routes of exposure	:	Not available.	
Potential acute health effects	5		
Eye contact	:	Causes serious eye damage.	
Inhalation	:	Can cause central nervous system (CNS) depredizziness. May cause respiratory irritation. Exp may cause a health hazard. Serious effects ma	posure to decomposition products
Skin contact	:	Causes severe burns. May cause an allergic sl	kin reaction.
Ingestion	:	Harmful if swallowed. Can cause central nervo cause burns to mouth, throat and stomach.	us system (CNS) depression. May
Symptoms related to the phy	sic	al, chemical and toxicological characteristics	5
Eye contact		Adverse symptoms may include the following:	_
		pain watering redness	
Inhalation	:	Adverse symptoms may include the following: respiratory tract irritation coughing nausea or vomiting headache drowsiness/fatigue dizziness/vertigo muscle weakness unconsciousness	
Skin contact	:	Adverse symptoms may include the following: pain or irritation redness blistering may occur	
Ingestion	:	Adverse symptoms may include the following: stomach pains	
Short term exposure Potential immediate		as well as chronic effects from short and long	<u>g-term exposure</u>
effects			
Potential delayed effects	:	Not available.	
Long term exposure Potential immediate effects	:	Not available.	
Potential delayed effects	:	Not available.	
Potential chronic health effe	ect	2	
Not available.			
Conclusion/Summary	:	Not available.	
General	:	May cause damage to organs through prolonge sensitized, a severe allergic reaction may occur low levels.	
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.	
Date of issue/Date of revision Version : 4		: 12/09/2019 10/15	AkzoNobel

K.International.

K.International.

SECTION 12: Ecological information

12.1 Toxicity

Product/ingredient name	Result	Species	Exposure
butan-1-ol	Acute EC50 1983 to 2072 mg/l Fresh water	Daphnia - Daphnia magna	48 hours
	Acute LC50 1910 mg/l Fresh water	Fish - Pimephales promelas - Juvenile (Fledgling, Hatchling, Weanling)	96 hours
trientine	Acute EC50 3700 µg/l Fresh water	Algae - Pseudokirchneriella subcapitata	96 hours
	Acute LC50 33900 µg/l Fresh water	Daphnia - Daphnia magna	48 hours
Conclusion/Summary	: Not available.		

12.2 Persistence and degradability

Conclusion/Summary : Not available.

12.3 Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
butan-1-ol	1	-	low
4,4'-methylenebis (cyclohexylamine)	2.03	-	low
trientine	-1.66 to -1.4	-	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.

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

<u>Product</u>	
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	: The classification of the product may meet the criteria for a hazardous waste.

European waste catalogue (EWC)

Code number	Waste designation
EWC 08 01 11*	waste paint and varnish containing organic solvents or other hazardous substances
Packaging	

Date of issue/Date of revision Version : 4

:

SECTION 13: Disposal considerations

Methods of disposal	 Dispose of containers contaminated by the product in accordance with local or national legal provisions. This material and its container must be disposed of as hazardous waste. Dispose of via a licensed waste disposal contractor.
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. Vapour from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

SECTION 14: Transport information

	ADR/RID	IMDG	ΙΑΤΑ
14.1 UN number	UN3470	UN3470	UN3470
14.2 UN proper shipping name	PAINT, CORROSIVE, FLAMMABLE	PAINT, CORROSIVE, FLAMMABLE	PAINT, CORROSIVE, FLAMMABLE
14.3 Transport hazard class(es)	8 (3)	8 (3)	8 (3)
14.4 Packing group	П	П	II
14.5 Environmental hazards	No.	No.	No.
Additional information	Tunnel code (D/E)	-	-

IMDG Code Segregation : Not applicable. group

14.6 Special precautions for user: **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	:	Not available.
according to Annex II of		
Marpol and the IBC Code		

SECTION 15: Regulatory information

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

Annex XIV - List of substances subject to authorisation

Annex XIV

Substances of very high concern

None of the components are listed.



SECTION 15: Regulatory information

g	
Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles	: Not applicable.
Other EU regulations	
Europe inventory	: Not determined.
Special packaging requirem	<u>ents</u>
Containers to be fitted with child-resistant fastenings	: Not applicable.
Tactile warning of danger	: Not applicable.
Ozone depleting substance	<u>∋s (1005/2009/EU)</u>
Not listed.	
Prior Informed Consent (PI Not listed.	<u>C) (649/2012/EU)</u>
<u>National regulations</u> References	: Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II and Regulation (EC) No. 1272/2008 (CLP)
15.2 Chemical safety assessment	: No Chemical Safety Assessment has been carried out.
SECTION 16: Other in	nformation
Indicates information that h	as changed from previously issued version.
Abbreviations and acronyms	: ATE = Acute Toxicity Estimate CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No.

acronyms	CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008] DMEL = Derived Minimal Effect Level DNEL = Derived No Effect Level EUH statement = CLP-specific Hazard statement PBT = Persistent, Bioaccumulative and Toxic PNEC = Predicted No Effect Concentration RRN = REACH Registration Number vPvB = Very Persistent and Very Bioaccumulative
	vi vD – very i ersistent and very bloaccumulative

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

Classification	Justification
Flam. Liq. 3, H226	On basis of test data
Acute Tox. 4, H302	Calculation method
Skin Corr. 1B, H314	Calculation method
Skin Sens. 1, H317	Calculation method
STOT SE 3, H335	Calculation method
STOT SE 3, H336	Calculation method
STOT RE 2, H373	Calculation method
Aquatic Chronic 3, H412	Calculation method

:

SECTION 16: Other information

X.International.

Full text of abbreviated H	: H226	Flammable liquid and vapour.	
statements	H302	Harmful if swallowed.	
	H312	Harmful in contact with skin.	
	H314	Causes severe skin burns and eye damage.	
	H315	Causes skin irritation.	
	H317	May cause an allergic skin reaction.	
	H318	Causes serious eye damage.	
	H335	May cause respiratory irritation.	
	H336	May cause drowsiness or dizziness.	
	H373 (oral)	May cause damage to organs through prolonged or	
		repeated exposure if swallowed.	
	H373	May cause damage to organs through prolonged or	
		repeated exposure.	
	H411	Toxic to aquatic life with long lasting effects.	
	H412	Harmful to aquatic life with long lasting effects.	
Full text of classifications	Acute Tox. 4, H302	ACUTE TOXICITY (oral) - Category 4	
[CLP/GHS]	Acute Tox. 4, H312	ACUTE TOXICITY (dermal) - Category 4	
	Aquatic Chronic 2, H411		
		LONG-TERM AQUATIC HAZARD - Category 3	
	Eye Dam. 1, H318	SERIOUS EYE DAMAGE/ EYE IRRITATION - Category	
		1	
	Flam. Liq. 3, H226	FLAMMABLE LIQUIDS - Category 3	
	Skin Corr. 1B, H314	SKIN CORROSION/IRRITATION - Category 1B	
	Skin Corr. 1C, H314	SKIN CORROSION/IRRITATION - Category 1C	
	Skin Irrit. 2, H315	SKIN CORROSION/IRRITATION - Category 2	
	Skin Sens. 1, H317	SKIN SENSITIZATION - Category 1	
	STOT RE 2, H373 (oral)		
		EXPOSURE) (oral) - Category 2	
	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) (Narcotic effects) - Category 3	
		LAT COURCE (Marcolic enects) - Calegory 5	
Date of printing	: 12/09/2019		
Date of issue/ Date of	: 12/09/2019		
revision			
Date of previous issue	: 01/06/2017		
Version	: 4		

Notice to reader

IMPORTANT NOTE: the information contained in this data sheet (as may be amended from time to time) is not intended to be exhaustive and is presented in good faith and believed to be correct as of the date on which it is prepared. It is the user's responsibility to verify that this data sheet is current prior to using the product to which it relates.

Persons using the information must make their own determinations as to the suitability of the relevant product for their purposes prior to use. Where those purposes are other than as specifically recommended in this safety data sheet, then the user uses the product at their own risk.

MANUFACTURER'S DISCLAIMER: the conditions, methods and factors affecting the handling, storage, application, use and disposal of the product are not under the control and knowledge of the manufacturer. Therefore the manufacturer does not assume responsibility for any adverse events which may occur in the handling, storage, application, use, misuse or disposal of the product and, so far as permitted by applicable law, the manufacturer expressly disclaims liability for any and all loss, damages and/or expenses arising out of or in any way connected to the storage, handling, use or disposal of the product. Safe handling, storage, use and disposal are the responsibility of the users. Users must comply with all applicable health and safety laws.

Unless we have agreed to the contrary, all products are supplied by us subject to our standard terms and



X.International.

SECTION 16: Other information

conditions of business, which include limitations of liability. Please make sure to refer to these and / or the relevant agreement which you have with AkzoNobel (or its affiliate, as the case may be). © AkzoNobel



AkzoNobel