In accordance with the Standard for Classification and Labelling of Chemical Substance and Material Safety Data Sheet, Article 10 Paragraph

SAFETY DATA SHEET

Intertherm 891 Aluminium

Section 1. Chemical product and company identification

: Intertherm 891 Aluminium A. Product name

Product code : HTA002

B. Relevant identified uses of the substance or mixture and uses advised against

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

C. Manufacturer	: International Paint Ltd. Stoneygate Lane Felling Gateshead Tyne and Wear NE10 0JY UK Tel: +44 (0)191 469 6111	Fax: +44 (0)191 438 3711
Emergency telephone number (with hours of operation)	: +44 (0)191 469 6111 (24H)	
e-mail address of person responsible for this SDS	: sdsfellinguk@akzonobel.com	

Section 2. Hazards identification

A. Hazard classification : FLAMMABLE LIQUIDS - Category 3 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) (central nervous system (CNS)) - Category 2 LONG-TERM AQUATIC HAZARD - Category 3

B. GHS label elements, including precautionary statements 1

Symbol



Signal word : Warning : Flammable liquid and vapour. **Hazard statements** May cause damage to organs through prolonged or repeated exposure. (central nervous system (CNS)) Harmful to aquatic life with long lasting effects. **Precautionary statements**

Prevention : Wear protective gloves. Wear eye or face protection. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use explosion-proof electrical, ventilating, lighting and all material-handling equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Keep container tightly closed. Avoid release to the environment. Do not breathe vapour.



Section 2. Hazards identification

Response	: Get medical attention if you feel unwell. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
Storage	: Store in a well-ventilated place. Keep cool.
Disposal	 Dispose of contents and container in accordance with all local, regional, national and international regulations.
Supplemental label elements	: Wear appropriate respirator when ventilation is inadequate.

C. Other hazards which do : None known. not result in classification

Section 3. Composition/information on ingredients

Substance/mixture

: Mixture

Ingredient name	Common name	CAS number	%	Classification
Naphtha (petroleum), hydrotreated heavy	naphtha (petroleum), hydrotreated heavy	64742-48-9	≥30 - <40	Asp. Tox. 1, H304
Aluminium powder (stabilized)	Aluminium stabilized	7429-90-5	≥10 - <15	Flam. Sol. 1, H228 Water-react. 2, H261
Naphtha (petroleum), hydrodesulfurized heavy	naphtha (petroleum), hydrodesulfurized heavy	64742-82-1	<10	Flam. Liq. 3, H226 STOT SE 3, H336 STOT RE 1, H372 (central nervous system (CNS)) (inhalation) Asp. Tox. 1, H304 Aquatic Chronic 2, H411

There are no ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

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

Section 4. First aid measures

- A. Eye contact
- : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention following exposure or if feeling unwell.
- **B. Skin contact** : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. Get medical attention following exposure or if feeling unwell. Wash clothing before reuse. Clean shoes thoroughly before reuse.

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Section 4. First aid measures

C.	Inhalation	:	Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention following exposure or if feeling unwell. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
D.	Ingestion	:	Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention following exposure or if feeling unwell. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
E.	Notes to physician	:	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
	Specific treatments	:	No specific treatment.
	Protection of first-aiders	:	No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

See toxicological information (Section 11)

Section 5. Firefighting measures

Α.	Extinguishing media		
	Suitable extinguishing media	:	Use dry chemical, CO ₂ , water spray (fog) or foam.
	Unsuitable extinguishing media	:	Do not use water jet.
В.	Specific hazards arising from the chemical	:	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.
	Hazardous thermal decomposition products	:	Decomposition products may include the following materials: metal oxide/oxides
C.	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.
	Special precautions 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.



Section 6. Accidental release measures

Α.	Personal precautions, protective equipment and emergency procedures	 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. Avoid breathing vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
В.	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.
C. Methods and material for containment and cleaning up		ontainment 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 (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spill product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

A. Precautions for safe handling

	Protective measures :	Put on appropriate personal protective equipment (see Section 8). Do not breathe vapour or mist. Do not ingest. Avoid contact with eyes, skin and clothing. 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.
В.	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. 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.



Section 8. Exposure controls/personal protection

A. Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
Aluminium powder (stabilized)	Ministry of Labor (Republic of Korea,
	8/2013).
	TWA: 10 mg/m ³ 8 hours. Form: Dust
	TWA: 5 mg/m ³ 8 hours. Form: Pyrophoric

- B. 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. The engineering controls also need to keep gas, vapour or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.
 - **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.

C. Personal protective equipment

Respiratory protection Eye protection	 Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. 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. 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. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.
Hand protection	 Use chemical resistant gloves classified under Standard EN 374: Protective gloves against chemicals and micro-organisms. Recommended: Viton® or Nitrile gloves. 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. The user must check that the final choice of type of glove selected for handling this product is the most appropriate and takes into account the particular conditions of use, as included in the user's risk assessment. NOTICE: The selection of a specific glove for a particular application and duration of use in a workplace should also take into account all relevant workplace factors such as, but not limited to: Other chemicals which may be handled, physical requirements (cut/ puncture protection, dexterity, thermal protection), potential body reactions to glove materials, as well as the instructions/specifications provided by the glove supplier. Barrier creams may help to protect the exposed areas of the skin but should not be applied once exposure has occurred.
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. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.
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.

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Section 9. Physical and chemical properties

Α.	<u>Appearance</u>		
	Physical state	:	Liquid.
	Colour	:	Metallic.
В.	Odour	:	Solvent.
C.	Odour threshold	:	Not available.
D.	рН	:	Not applicable.
Ε.	Melting/freezing point	:	Not available.
F.	Boiling point/boiling range	:	Lowest known value: 155 to 217°C (311 to 422.6°F)(Naphtha (petroleum), hydrotreated heavy).
G.	Flash point	:	Closed cup: 36°C (96.8°F)
	Fire point	:	Not available.
Н.	Evaporation rate	:	Not available.
I.	Flammability (solid, gas)	:	Not available.
J.	Lower and upper explosive (flammable) limits	:	Greatest known range: Lower: 1.4% Upper: 7.6% (Naphtha (petroleum), hydrotreated heavy)
K.	Vapour pressure	:	Not available.
L.	Solubility	:	Insoluble in the following materials: cold water.
М.	Vapour density	:	Not available.
Ν.	Relative density	:	0.96
0.	Partition coefficient: n- octanol/water	:	Not available.
Ρ.	Auto-ignition temperature	:	Not available.
Q.	Decomposition temperature	:	Not available.
R.	Viscosity	:	Kinematic (room temperature): 153 mm ² /s (153 cSt)
S.	Molecular weight	:	Not applicable.

Section 10. Stability and reactivity

Α.	Chemical stability	:	The product is stable.
	Possibility of hazardous reactions	:	Under normal conditions of storage and use, hazardous reactions will not occur.
В.	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.
C.	Incompatible materials	:	Reactive or incompatible with the following materials: oxidizing materials
D.	Hazardous decomposition products	:	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

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Α.

X.International.

Section 11. Toxicological information

Information on likely routes of exposure	: Not available.		
Potential acute health effects			
Inhalation	: No known significant effects or critical hazards.		
Ingestion	: No known significant effects or critical hazards.		
Skin contact	: No known significant effects or critical hazards.		
Eye contact	: No known significant effects or critical hazards.		
Over-exposure signs/symptoms			
Inhalation	: Adverse symptoms may include the following: headache drowsiness/fatigue dizziness/vertigo muscle weakness unconsciousness		
Ingestion	: No specific data.		
Skin contact	: No specific data.		
Eye contact	: No specific data.		

B. Health hazards

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Naphtha (petroleum), hydrotreated heavy	LD50 Oral	Rat	6000 mg/kg	-

Irritation/Corrosion

Not available.

Sensitisation

Not available.

CMR - ISHA Article 42 Public Notice No 2013-38 Occupational Exposure Limits

Not available.

<u>Mutagenicity</u>

Not available.

Carcinogenicity

Not available.

Reproductive toxicity

Not available.

Teratogenicity

Not available.

:

Specific target organ toxicity (single exposure)

Name		Route of exposure	Target organs
Naphtha (petroleum), hydrodesulfurized heavy	Category 3	Not applicable.	Narcotic effects

Specific target organ toxicity (repeated exposure)



Section 11. Toxicological information

Name	· · · J · J	Route of exposure	Target organs
Naphtha (petroleum), hydrodesulfurized heavy	Category 1		central nervous system (CNS)

Aspiration hazard

Name	Result
Naphtha (petroleum), hydrotreated heavy	ASPIRATION HAZARD - Category 1
Naphtha (petroleum), hydrodesulfurized heavy	ASPIRATION HAZARD - Category 1

Potential chronic health effects

Chronic toxicity

Not available.

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

ATE value

Not available.

Section 12. Ecological information

A. Ecotoxicity

Not available.

B. Persistence and degradability

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
Naphtha (petroleum), hydrodesulfurized heavy	-	-	Not readily

C. Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential	
Naphtha (petroleum), hydrotreated heavy Naphtha (petroleum), hydrodesulfurized heavy	-	10 to 2500 10 to 2500	high high	

D. Mobility in soil

:

Soil/water partition : Not available. coefficient (Koc)

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

Section 13. Disposal considerations

Α.	Disposal methods	: 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. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.
В.	Disposal 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

UN JN1263	IMDG UN1263	ΙΑΤΑ
JN1263	LINI1263	
	0111203	UN1263
PAINT	PAINT	PAINT
	3	3
II	III	
No.	No.	No.
	-	-
3		

IMDG Code Segregation : Not applicable. group

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.

Section 15. Regulatory information

A. <u>Regulation according to ISHA</u>

ISHA article 37 (Harmful substances prohibited from manufacture)	: None of the components are listed.
ISHA article 38 (Harmful substances requiring permission)	: None of the components are listed.





Section 15. Regulatory information

	ootion for Rogan		, y momadon			
	Article 2 of Youth Protection Act on Substances Hazardous to Youth	:	Not applicable.			
	Exposure Limits of Chemical Substances and Physical Factors					
	The following components have an OEL: aluminium powder (stabilised)					
	ISHA Enforcement Regs : None of the components are listed. Annex 11-3 (Exposure standards established for harmful factors)					
	ISHA Enforcement Regs Annex 11-4 (Harmful factors subject to Work Environment Measurement)	:	The following components are listed: Aluminum, metal			
	ISHA Enforcement Regs Annex 12-2 (Harmful Factors Subject to Special Health Check- up)	:	The following components are listed: Aluminum and compounds			
	Standard of Industrial Safety and Health Annex 12 (Hazardous substances subject to control)	:	The following components are listed: Aluminum and its compounds			
В.	8. Regulation according to Chemicals Control Act					
	K-Reach Article 20 (Toxic chemicals)	:	Not applicable			
	K-Reach Article 27 (Prohibited)	:	None of the components are listed.			
	K-Reach Article 27 (Restricted)	:	None of the components are listed.			
	CSCA Article 11 (TRI)	:	The following components are listed: Aluminium and its compounds			
	Korea inventory	:	All components are listed or exempted.			
	CSCA Article 39 (Accident Precaution Chemicals)	:	None of the components are listed.			
C.	Dangerous Materials Safety Management Act		Class: Class 4 - Flammable Liquid Item: 4. Class 2 petroleums - Water-insoluble liquid Threshold: 1000 L Danger category: III Signal word: Contact with sources of ignition prohibited			
D.	Wastes regulation		Dispose of contents and container in accordance with all local, regional, national and international regulations.			
Ε.	Regulation according to	<u>othe</u>	<u>er foreign laws</u>			
	Europe inventory	:	Not determined.			
	United States inventory (TSCA 8b)	:	All components are listed or exempted.			
	Japan inventory		Japan inventory (ENCS): Not determined. Japan inventory (ISHL): Not determined.			



Section 16. Other information

A. References	: Not available.
B. Date of issue/Date of revision	: 04/05/2017
C. Version	: 3
Date of printing	: 04/05/2017

D. Other

Indicates information that has changed from previously issued version.

Key to abbreviations	: ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor GHS = Globally Harmonized System of Classification and Labelling of Chemicals IATA = International Air Transport Association IBC = Internediate Bulk Container IMDG = International Maritime Dangerous Goods LogPow = logarithm of the octanol/water partition coefficient MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
	UN = United Nations

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.

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