

SAFETY DATA SHEET

Torrex Fire Upgrading Gloss Finish

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

1.1 Product identifier

Product name : Torrex Fire Upgrading Gloss Finish

Product description : Coating.
Product type : Liquid.

UFI : W8R0-10RD-P00E-P204

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

Identified uses					
Industrial uses Professional uses					
Uses advised against Reason					
Consumer use	Product is not intended for consumer use.				

1.3 Details of the supplier of the safety data sheet

Tor Coatings Limited Portobello Industrial Estate Birtley County Durham United Kingdom DH3 2RE

Telephone no.: +44 (0) 191 4106611 Fax no.: +44 (0) 191 4920125 enquiries@tor-coatings.com

e-mail address of person : rpmeurohas@rustoleum.eu

responsible for this SDS

1.4 Emergency telephone number

Supplier

Telephone number : +44 (0) 207 858 1228

Hours of operation: 24 / 7

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 Carc. 2, H351 STOT SE 3, H336 Aquatic Chronic 3, H412

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

Date of issue/Date of revision: 7/11/2019Date of previous issue: No previous validationVersion: 1

SECTION 2: Hazards identification

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 : Flammable liquid and vapour.

Suspected of causing cancer.

May cause drowsiness or dizziness.

Harmful to aquatic life with long lasting effects.

Precautionary statements

General : Not applicable.

Prevention : P210 - Keep away from heat, sparks, open flames and hot surfaces. - No smoking.

P281 - Use personal protective equipment as required. P271 - Use only outdoors or in a well-ventilated area.

Response : P370 - In case of fire:

P378 - Use water spray, dry chemical powder or carbon dioxide to extinguish.

P308 - IF exposed or concerned: P313 - Get medical attention.

Storage : P403 - Store in a well-ventilated place.

P235 - Keep cool. P405 - Store locked up.

Disposal : P501 - Dispose of contents and container in accordance with all local, regional,

national and international regulations.

Hazardous ingredients: hydrocarbons, C9-C11, n-/ iso-/ cyclo-alkanes, < 2% aromatics and diantimony

trioxide

Supplemental label

elements

Contains neodecanoic acid, cobalt salt. May produce an allergic reaction.

Repeated exposure may cause skin dryness or cracking.

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 with child-resistant

fastenings

: Not applicable.

Tactile warning of danger : Not applicable.

2.3 Other hazards

Product meets the criteria for PBT or vPvB according to Regulation (EC) No. 1907/2006, Annex XIII : This mixture contains substances that are assessed to be a PBT or a vPvB, refer to

Section 3.2.

Other hazards which do not result in classification

: None known.

Date of issue/Date of revision : 7/11/2019 Date of previous issue : No previous validation Version : 1 2/17

SECTION 3: Composition/information on ingredients

3.2 Mixtures : Mixture

			<u>Classification</u>	
Product/ingredient name	Identifiers	%	Regulation (EC) No. 1272/2008 [CLP]	Туре
hydrocarbons, C9-C11, n-/ iso-/ cyclo-alkanes, < 2% aromatics	REACH #: 01-2119463258-33 EC: 919-857-5 Index: 649-327-00-6	≥25 - ≤50	Flam. Liq. 3, H226 STOT SE 3, H336 Asp. Tox. 1, H304 EUH066	[1] [2]
bis(pentabromophenyl) ether	REACH #: 01-2119472302-47 EC: 214-604-9 CAS: 1163-19-5	≤10	Not classified.	[3] [4]
diantimony trioxide	REACH #: 01-2119475613-35 EC: 215-175-0 CAS: 1309-64-4 Index: 051-005-00-X	≤5	Carc. 2, H351	[1] [2]
hydrocarbons, aromatic, C9	REACH #: 01-2119455851-35 EC: 918-668-5 CAS: 64742-95-6 Index: 649-356-00-4	≤5	Flam. Liq. 3, H226 STOT SE 3, H335 STOT SE 3, H336 Asp. Tox. 1, H304 Aquatic Chronic 2, H411 EUH066	[1]
neodecanoic acid, cobalt salt	REACH #: 01-2119970733-31 EC: 248-373-0 CAS: 27253-31-2	≤0,3	Acute Tox. 4, H302 Skin Sens. 1, H317 STOT RE 1, H372 Aquatic Chronic 3, H412 See Section 16 for the full text of the H statements declared above.	[1] [2]

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, vPvBs or Substances of equivalent concern, 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.

SECTION 4: First aid measures

4.1 Description of first aid measures

4.1 Description of first aid n	easures
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	: 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.
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.

Date of issue/Date of revision : 7/11/2019 Date of previous issue : No previous validation Version : 1 3/17

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.

4.2 Most important symptoms and effects, both acute and delayed

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.

Contains neodecanoic acid, cobalt salt. May produce an allergic reaction.

Over-exposure signs/symptoms

Eye contact : No specific data.

Inhalation : Adverse symptoms may include the following:

nausea or vomiting

headache

drowsiness/fatigue dizziness/vertigo unconsciousness

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.

See toxicological information (Section 11)

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing

: Recommended: alcohol-resistant foam, CO2, powders, water spray.

Unsuitable extinguishing

media

media

: Do not use water jet.

5.2 Special hazards arising from the substance or mixture

Date of issue/Date of revision : 7/11/2019 Date of previous issue : No previous validation Version : 1 4/17

SECTION 5: Firefighting measures

Hazards from the substance or mixture

Flammable liquid and vapour. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. 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: carbon dioxide carbon monoxide halogenated compounds

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.

Additional information

No unusual hazard if involved in a fire.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

metal oxide/oxides

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. 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.

6.3 Methods and material for containment 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 noncombustible, 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.

Date of issue/Date of revision : 7/11/2019 Date of previous issue : No previous validation Version: 1 5/17

SECTION 6: Accidental release measures

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.

7.1 Precautions for safe handling

: Prevent the creation of flammable or explosive concentrations of vapours in air and avoid vapour concentrations higher than the occupational exposure limits. In addition, the product should only be used in areas from which all naked lights and other sources of ignition have been excluded. Electrical equipment should be protected to the appropriate standard.

Mixture may charge electrostatically: always use earthing leads when transferring from one container to another.

Operators should wear antistatic footwear and clothing and floors should be of the conducting type.

Keep away from heat, sparks and flame. No sparking tools should be used. Avoid contact with skin and eyes. Avoid the inhalation of dust, particulates, spray or mist arising from the application of this mixture. Avoid inhalation of dust from

sanding. Eating, drinking and smoking should be prohibited in areas where this material is

handled, stored and processed. Put on appropriate personal protective equipment (see Section 8).

Never use pressure to empty. Container is not a pressure vessel.

Always keep in containers made from the same material as the original one.

Comply with the health and safety at work laws. Do not allow to enter drains or watercourses.

Information on fire and explosion protection

Vapours are heavier than air and may spread along floors. Vapours may form explosive mixtures with air.

7.2 Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations.

Notes on joint storage

Keep away from: oxidising agents, strong alkalis, strong acids.

Additional information on storage conditions

Observe label precautions. Store in a dry, cool and well-ventilated area. Keep away from heat and direct sunlight. Keep away from sources of ignition. No smoking. Prevent unauthorised access. Containers that have been opened must be carefully resealed and kept upright to prevent leakage.

Danger criteria

	Notification and MAPP threshold	Safety report threshold
P5c	5000 tonne	50000 tonne

7.3 Specific end use(s)

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

Date of issue/Date of revision : 7/11/2019 Date of previous issue : No previous validation Version: 1 6/17

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
hydrocarbons, C9-C11, n-/ iso-/ cyclo-alkanes, < 2% aromatics	EH40/2005 WELs (United Kingdom (UK), 8/2007). STEL: 850 mg/m³, (as turpentine (150 ppm)) 15 minutes. Form: Vapour TWA: 566 mg/m³, (as turpentine (100 ppm)) 8 hours. Form:
	Vapour
diantimony trioxide	EH40/2005 WELs (United Kingdom (UK), 12/2011). Notes: as Sb TWA: 0,5 mg/m³, (as Sb), 0 times per shift, 8 hours.
neodecanoic acid, cobalt salt	EH40/2005 WELs (United Kingdom (UK), 12/2011). Inhalation sensitiser. TWA: 0,1 mg/m³, (as Co) 8 hours.

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.

DNELs/DMELs

Product/ingredient name	Type	Exposure	Value	Population	Effects
hydrocarbons, C9-C11, n-/ iso-/ cyclo-alkanes, < 2% aromatics	DNEL	Long term Dermal	208 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	871 mg/m³	Workers	Systemic
	DNEL	Long term Oral	125 mg/kg bw/day	General population [Consumers]	Systemic
	DNEL	Long term Inhalation	185 mg/m³	General population [Consumers]	Systemic
	DNEL	Long term Dermal	125 mg/kg bw/day	General population [Consumers]	Systemic

PNECs

No PNECs available

8.2 Exposure controls

Appropriate engineering controls

: Provide adequate ventilation. Where reasonably practicable, this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and solvent vapours below the OEL, suitable respiratory protection must be worn.

Individual protection measures

Date of issue/Date of revision : 7/11/2019 Date of previous issue : No previous validation Version : 1 7/17

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

: 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.

Skin protection

Hand protection

There is no one glove material or combination of materials that will give unlimited resistance to any individual or combination of chemicals.

The breakthrough time must be greater than the end use time of the product.

The instructions and information provided by the glove manufacturer on use, storage, maintenance and replacement must be followed.

Gloves should be replaced regularly and if there is any sign of damage to the glove material.

Always ensure that gloves are free from defects and that they are stored and used correctly.

The performance or effectiveness of the glove may be reduced by physical/chemical damage and poor maintenance

Barrier creams may help to protect the exposed areas of the skin but should not be applied once exposure has occurred.

Gloves

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

Recommended: > 8 hours (breakthrough time): nitrile rubber (0.5mm)

The recommendation for the type or types of glove to use when handling this product is based on information from the following source:

EN 374

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.

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. Refer to European Standard EN 1149 for further information on material and design requirements and test methods. Recommended: Wear overalls or long sleeved shirt. (EN 1149-1)

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

: Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use. Recommended: organic vapour filter (Type A) (EN 140)

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.

Date of issue/Date of revision : 7/11/2019 Date of previous issue : No previous validation Version : 1 8/17

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance

Physical state : Liquid.

Colour : Not available. Odour Not available. : Not available. **Odour threshold** pН Not available. Melting point/freezing point : Not available.

Initial boiling point and

boiling range

: Not available.

: Closed cup: 37°C Flash point **Evaporation rate** : Not available.

Flammability (solid, gas) : Flammable in the presence of the following materials or conditions: open flames,

sparks and static discharge, heat and shocks and mechanical impacts.

Upper/lower flammability or

explosive limits

: Not available.

: Not available. Vapour pressure Vapour density : Not available. **Relative density** : 1.05 to 1.25

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

Partition coefficient: n-octanol/ : Not available.

water

Auto-ignition temperature : Not available. **Decomposition temperature** : Not available.

Viscosity : Dynamic (room temperature): 630 mPa·s

Kinematic (40°C): >0,205 cm²/s

Explosive properties Non-explosive in the presence of the following materials or conditions: open

flames, sparks and static discharge, heat and shocks and mechanical impacts.

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

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.

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 : Under normal conditions of storage and use, hazardous decomposition products should not be produced. If involved in a fire, toxic gases including CO, CO2 and smoke can be generated.

Date of issue/Date of revision : 7/11/2019 Date of previous issue Version 9/17 : No previous validation

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
bis(pentabromophenyl) ether	LD50 Oral	Rat	2 g/kg	-
diantimony trioxide	LC50 Inhalation Dusts and mists	Rat	>5200 mg/m³	4 hours
	LD50 Dermal	Rabbit	>8300 mg/kg	-
	LD50 Oral	Rat	>34,6 g/kg	-
hydrocarbons, aromatic, C9	LD50 Oral	Mouse	8400 mg/kg	-
	LD50 Oral	Rat	8400 mg/kg	-
neodecanoic acid, cobalt salt	LD50 Oral	Rat - Female	1098 mg/kg	-

Conclusion/Summary

: Based on available data, the classification criteria are not met.

Acute toxicity estimates

Not available.

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
bis(pentabromophenyl) ether	Eyes - Severe irritant	Rabbit	-	100 microliters	-
diantimony trioxide	Eyes - Mild irritant	Rabbit	-	100 milligrams	-
hydrocarbons, aromatic, C9	Eyes - Mild irritant	Rabbit		24 hours 100 microliters	-

Conclusion/Summary

Skin : Based on available data, the classification criteria are not met.Eyes : Based on available data, the classification criteria are not met.

Respiratory: May cause drowsiness or dizziness.

Sensitisation

Product/ingredient name	Route of exposure	Species	Result
hydrocarbons, C9-C11, n-/ iso-/ cyclo-alkanes, < 2% aromatics	skin	Rabbit	Not sensitizing

Conclusion/Summary

Skin : Based on available data, the classification criteria are not met.Respiratory : Based on available data, the classification criteria are not met.

Mutagenicity

Product/ingredient name	Test	Experiment	Result
hydrocarbons, aromatic, C9	OECD 471	Subject: Bacteria	Negative

Conclusion/Summary

: Based on available data, the classification criteria are not met.

Carcinogenicity

Conclusion/Summary: Suspected of causing cancer.

Reproductive toxicity

Product/ingredient name	Maternal toxicity	Fertility	Developmental toxin	Species	Dose	Exposure
hydrocarbons, aromatic, C9	-	-		unspecified	Route of exposure unreported	-

Date of issue/Date of revision: 7/11/2019Date of previous issue: No previous validationVersion: 1

SECTION 11: Toxicological information

Conclusion/Summary: Based on available data, the classification criteria are not met.

Teratogenicity

Conclusion/Summary: Based on available data, the classification criteria are not met.

Specific target organ toxicity (single exposure)

Product/ingredient name	Category	Route of exposure	Target organs
hydrocarbons, C9-C11, n-/ iso-/ cyclo-alkanes, < 2% aromatics hydrocarbons, aromatic, C9	Category 3 Category 3 Category 3	Not applicable.	Narcotic effects Narcotic effects Respiratory tract irritation

Specific target organ toxicity (repeated exposure)

Product/ingredient name	Category	Route of exposure	Target organs
neodecanoic acid, cobalt salt	Category 1	Not determined	Not determined

Aspiration hazard

Product/ingredient name	Result
hydrocarbons, C9-C11, n-/ iso-/ cyclo-alkanes, < 2% aromatics hydrocarbons, aromatic, C9	ASPIRATION HAZARD - Category 1 ASPIRATION HAZARD - Category 1

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: Based on available data, the classification criteria are not met.

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

or dermatitis.

Carcinogenicity : Suspected of causing cancer. Risk of cancer depends on duration and level of

exposure.

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.

SECTION 12: Ecological information

12.1 Toxicity

There are no data available on the mixture itself.

Do not allow to enter drains or watercourses.

The mixture has been assessed following the summation method of the CLP Regulation (EC) No 1272/2008 and is classified for eco-toxicological properties accordingly. See Sections 2 and 3 for details.

Date of issue/Date of revision : 7/11/2019 Date of previous issue : No previous validation Version : 1 11/17

SECTION 12: Ecological information

Product/ingredient name	Result	Species	Exposure
hydrocarbons, C9-C11, n-/ iso-/ cyclo-alkanes, < 2% aromatics	Acute NOEC 100 mg/l	Algae - Pseudokirchneriella subcapitata	72 hours
	Chronic NOEC 0,23 mg/l	Daphnia spec.	_
	Chronic NOEC 0,131 mg/l	Fish	-
bis(pentabromophenyl) ether	Acute LC50 >500 mg/l	Fish	96 hours
diantimony trioxide	Acute EC50 730 μg/l Fresh water	Algae - Pseudokirchneriella subcapitata	72 hours
	Acute EC50 423450 µg/l Fresh water	Daphnia spec Daphnia magna	48 hours
	Acute LC50 4,15 ppm Marine water	Crustaceans - Americamysis bahia	48 hours
	Acute LC50 >530 mg/l Fresh water	Fish - Lepomis macrochirus - Young of the year	96 hours
	Acute LC50 80000 µg/l Fresh water	Fish - Pimephales promelas	96 hours
	Chronic NOEC 200 μg/l Fresh water	Algae - Pseudokirchneriella subcapitata	96 hours

Conclusion/Summary: Harmful to aquatic life with long lasting effects.

12.2 Persistence and degradability

Product/ingredient name	Test	Result	Dose	Inoculum
hydrocarbons, C9-C11, n-/ iso-/ cyclo-alkanes, < 2% aromatics	OECD 301B	>80 % - Readily - 28 days	-	-
aromatics	OECD 301F	>80 % - Readily - 28 days	-	-

Conclusion/Summary

: This product has not been tested for biodegradation. Based on available data, the classification criteria are not met.

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
hydrocarbons, C9-C11, n-/ iso-/ cyclo-alkanes, < 2% aromatics	-	100%; < 28 day(s)	Readily
hydrocarbons, aromatic, C9	-	-	Readily

12.3 Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
hydrocarbons, C9-C11, n-/ iso-/ cyclo-alkanes, < 2% aromatics	5 to 6.5	-	high
bis(pentabromophenyl) ether hydrocarbons, aromatic, C9 neodecanoic acid, cobalt salt	3.7 to 4.5	<50 - 15600	low high high

12.4 Mobility in soil

Soil/water partition coefficient (K_{oc})

: Not available.

Mobility : Volatile.

12.5 Results of PBT and vPvB assessment

Date of issue/Date of revision: 7/11/2019Date of previous issue: No previous validationVersion: 112/17

SECTION 12: Ecological information

Product/ingredient name	PBT	Р	В	Т	vPvB	vP	vB
hydrocarbons, C9-C11, n-/ iso-/ cyclo-alkanes, < 2% aromatics	No	N/A	N/A	No	N/A	N/A	N/A
bis(pentabromophenyl) ether	SVHC (Candidate)	Specified	Specified	Specified	SVHC (Candidate)	Specified	Specified
hydrocarbons, aromatic, C9	No	N/A	N/A	No	N/A	N/A	N/A

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.

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 nonrecyclable 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

Disposal considerations

: Do not allow to enter drains or watercourses. Dispose of according to all federal, state and local applicable regulations. If this product is mixed with other wastes, the original waste product code may no

longer apply and the appropriate code should be assigned. For further information, contact your local waste authority.

European waste catalogue (EWC)

The European Waste Catalogue classification of this product, when disposed of as waste, is:

Waste code	Waste designation
08 01 11*	waste paint and varnish 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.

Disposal considerations

: Using information provided in this safety data sheet, advice should be obtained from the relevant waste authority on the classification of empty containers. Empty containers must be scrapped or reconditioned.

Dispose of containers contaminated by the product in accordance with local or national legal provisions.

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.

Date of issue/Date of revision : 7/11/2019 Date of previous issue : No previous validation Version: 1 13/17

SECTION 14: Transport information

	ADR/RID	ADN	IMDG	IATA
14.1 UN number	Not regulated.	Not regulated.	UN1263	UN1263
14.2 UN proper shipping name	-	-	Paint.	Paint.
14.3 Transport hazard class(es)	-	-	3	3
14.4 Packing group	-	-	III	III
14.5 Environmental hazards	No.	No.	No.	No.
Additional information	Exempted according to 2.2.3.1.5 (Viscous substance exemption) This class 3 material is not subject to regulation in packagings up to 450 L.		Emergency schedules (EmS): F-E + S-E Viscous substance exemption This class 3 material can be considered non hazardous in packagings up to 30 L. Exempted according to 2.3.2.5 (Viscous substance exemption)	Passenger and Cargo Aircraft Quantity limitation: 60 L Packaging instructions: 355 Cargo Aircraft Only Quantity limitation: 220 L Packaging instructions: 366 Limited Quantities - Passenger Aircraft Quantity limitation: 10 L Packaging instructions: Y 344

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.

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		Date of revision
Bis(pentabromophenyl) ether; DecaBDE -	PBT vPvB	ED/169/2012 ED/169/2012	

SECTION 15: Regulatory information

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

: Not applicable.

Other EU regulations

VOC

: The provisions of Directive 2004/42/EC on VOC apply to this product. Refer to the

product label and/or technical data sheet for further information.

VOC for Ready-for-Use

Mixture

: 2004/42/EC - IIA/i: 500g/l (2010). <= 400g/l VOC.

Europe inventory : All components are listed or exempted.

Product/ingredient name	Carcinogenic effects	Mutagenic effects	Developmental effects	Fertility effects
diantimony trioxide	Carc. 2, H351	-	-	-

Ozone depleting substances (1005/2009/EU)

Not listed.

Prior Informed Consent (PIC) (649/2012/EU)

Not listed.

Seveso Directive

This product is controlled under the Seveso Directive.

Danger criteria

Category

P₅c

National regulations

The information contained in this safety data sheet does not constitute the user's own assessment of workplace risks, as required by other health and safety legislation. The provisions of the national health and safety at work regulations apply to the use of this product at work.

Product/ingredient name	List name	Name on list	Classification	Notes
salt	UK Occupational Exposure Limits EH40 - WEL	cobalt compounds	Carc.	-

References : EH40/2005 Workplace exposure limits

Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by

Regulation (EU) No. 2016/918

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

Montreal Protocol (Annexes A, B, C, E)

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Informed Consent (PIC)

Octabromodiphenyl ether commercial mixtures typically containing hexabromodiphenylether, heptabromodiphenyl ether, octabromodiphenyl ether, nonabromodiphenyl ether and

decabromodiphenyl ether; Adine 404

Listed

Date of issue/Date of revision : 7/11/2019 Date of previous issue : No previous validation Version: 1 15/17

Industrial

SECTION 15: Regulatory information

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

CN code : 3208 90 91

International lists

National inventory

Australia : At least one component is not listed.

Canada : Not determined.
China : Not determined.

Japan : Japan inventory (ENCS): At least one component is not listed.

Japan inventory (ISHL): At least one component is not listed.

Malaysia : Not determined

New Zealand : At least one component is not listed.

Philippines : Not determined.

Republic of Korea : At least one component is not listed.

Taiwan : Not determined.
Turkey : Not determined.

United States : All components are listed or exempted.

Thailand : Not determined.

Viet Nam : Not determined.

15.2 Chemical safety

assessment

: No Chemical Safety Assessment has been carried out.

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]

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

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

Classification	Justification
Flam. Liq. 3, H226	Expert judgment
Carc. 2, H351	Expert judgment
STOT SE 3, H336	Expert judgment
Aquatic Chronic 3, H412	Expert judgment

Full text of H-phrases referred to in sections 2 and 3

Full text of abbreviated	Н
statements	

H226	Flammable liquid and vapour.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H317	May cause an allergic skin reaction.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H351	Suspected of causing cancer.
H372	Causes damage to organs through prolonged or repeated exposure.

Date of issue/Date of revision: 7/11/2019Date of previous issue: No previous validationVersion: 116/17

SECTION 16: Other information

H411

: 7/11/2019

: 7/11/2019

Full text of classifications [CLP/GHS]

H412	Harmful to aquatic life with long lasting effects.
Acute Tox. 4, H302	ACUTE TOXICITY (oral) - Category 4
Aquatic Chronic 2, H411	LONG-TERM (CHRONIC) AQUATIC HAZARD -
	Category 2
Aquatic Chronic 3, H412	LONG-TERM (CHRONIC) AQUATIC HAZARD -
	Category 3
Asp. Tox. 1, H304	ASPIRATION HAZARD - Category 1
Carc. 2, H351	CARCINOGENICITY - Category 2
EUH066	Repeated exposure may cause skin dryness or cracking.
Flam. Liq. 3, H226	FLAMMABLE LIQUIDS - Category 3
Skin Sens. 1, H317	SKIN SENSITISATION - Category 1
STOT RE 1, H372	SPECIFIC TARGET ORGAN TOXICITY - REPEATED
	EXPOSURE - Category 1
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

Toxic to aquatic life with long lasting effects.

Date of printing

Date of issue/ Date of

revision

Date of previous issue : No previous validation

Version : 1

Notice to reader

The information in this Safety Data Sheet is based on the present state of knowledge and current legislation. It provides guidance on health, safety and environmental aspects of the product and should not be construed as any guarantee of technical performance or suitability for particular applications. The product should not be used for purposes other than those shown in Section 1 without first referring to the supplier and obtaining written handling instructions. As the specific conditions of use of the product are outside the supplier's control, the user is responsible for ensuring that the requirements of relevant legislation are complied with. The information contained in this safety data sheet does not constitute the user's own assessment of workplace risks, as required by other health and safety legislation.

Date of issue/Date of revision : 7/11/2019 Date of previous issue : No previous validation Version : 1 17/17