



Safety Data Sheet

HEMPEL'S DURA-GLOSS VARNISH

Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Regulation (EU) No. 453/2010 - New Zealand

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

1.1 Product identifier

Product name : HEMPEL'S DURA-GLOSS VARNISH
Product identity : 0208000000
Product type : Varnish.

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

Field of application : yacht, ships and shipyards.
Identified uses : Consumer applications, Industrial applications, Used by spraying.

1.3 Details of the supplier of the safety data sheet

Company details :	Hempel (New Zealand) 163 Pilkington Road Auckland 1072 New Zealand Telephone number: +64 (0) 9 570 6654 Fax: +64 (0) 9 570 6634	Emergency telephone number Poisons Centre New Zealand: 0800 764 766 See section 4 First aid measures.
Date of Preparation :	19 May 2014	
Date of previous issue	No previous validation.	

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Product definition : Mixture

GHS Classification

FLAMMABLE LIQUIDS - Category 3
AQUATIC TOXICITY (CHRONIC) - Category 2

2.2 Label elements

Hazard pictograms :



Signal word : Warning
Hazard statements : Flammable liquid and vapor.
Toxic to aquatic life with long lasting effects.
Precautionary statements :
General : Read label before use. Keep out of reach of children. If medical advice is needed, have product container or label at hand.
Prevention : Wear protective gloves. Wear eye or face protection. Keep away from heat, sparks, open flames and hot surfaces. - 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.
Response : Collect spillage. 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.
Hazardous ingredients :

2.3 Other hazards



SECTION 2: Hazards identification

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

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Product/ingredient name	Identifiers	%	GHS Classification
white spirit	*64742-88-7	25 - <35	ASPIRATION HAZARD - Category 1 AQUATIC TOXICITY (CHRONIC) - Category 2 FLAMMABLE LIQUIDS - Category 3
naphtha (petroleum), hydrotreated heavy derivative of benzotriazol	64742-48-9	15 - <20 0.25 - <1	ASPIRATION HAZARD - Category 1 SKIN SENSITIZATION - Category 1 AQUATIC TOXICITY (CHRONIC) - Category 2 ACUTE TOXICITY: ORAL - Category 4
phthalic anhydride	85-44-9	0.1 - <1	SKIN CORROSION/IRRITATION - Category 2 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1 RESPIRATORY SENSITIZATION - Category 1 SKIN SENSITIZATION - Category 1 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) [Respiratory tract irritation] - Category 3
2-butanone oxime	96-29-7	0.1 - <1	ACUTE TOXICITY: SKIN - Category 4 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1 SKIN SENSITIZATION - Category 1
bis (1,2,2,6,6-pentamethyl-4-piperidyl) sebacate	41556-26-7	<0.25	CARCINOGENICITY - Category 2 SKIN SENSITIZATION - Category 1 AQUATIC TOXICITY (ACUTE) - Category 1 AQUATIC TOXICITY (CHRONIC) - Category 1
cobalt(2+) salts of C6-19 branched fatty acids	68409-81-4	0.1 - <0.25	ACUTE TOXICITY: ORAL - Category 4 SKIN CORROSION/IRRITATION - Category 2 SKIN SENSITIZATION - Category 1 AQUATIC TOXICITY (CHRONIC) - Category 2
zirconium octoate	22464-99-9	<0.5	TOXIC TO REPRODUCTION [Fertility] - Category 2 TOXIC TO REPRODUCTION [Unborn child] - Category 2

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

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 and hence require reporting in this section.

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 breathing is irregular, drowsiness, loss of consciousness or cramps: Call 112 and give immediate treatment (first aid).

Eye contact :

Check for and remove any contact lenses. Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. In all cases of doubt, or when symptoms persist, seek medical attention.

Inhalation :

Remove to fresh air. Keep person warm and at rest. If unconscious, place in recovery position and seek medical advice.

Skin contact :

Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognized skin cleanser. Do NOT use solvents or thinners.

Ingestion :

If swallowed, seek medical advice immediately and show this container or label. Keep person warm and at rest. Do not induce vomiting unless directed to do so by medical personnel. Lower the head so that vomit will not re-enter the mouth and throat.

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.

4.2 Most important symptoms and effects, both acute and delayed

Potential acute health effects

Eye contact :

No known significant effects or critical hazards.

Inhalation :

No known significant effects or critical hazards.

Skin contact :

Defatting to the skin. May cause skin dryness and irritation.



SECTION 4: First aid measures

Ingestion : No known significant effects or critical hazards.

Over-exposure signs/symptoms

Eye contact : No specific data.

Inhalation : No specific data.

Skin contact : Adverse symptoms may include the following:
irritation
dryness
cracking

Ingestion : No specific data.

4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

Specific treatments : No specific treatment.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Extinguishing media : Recommended: alcohol resistant foam, CO₂, powders, water spray.
Not to be used: waterjet.

5.2 Special hazards arising from the substance or mixture

Hazards from the substance or mixture : Flammable liquid and vapor. 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 toxic to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

Hazardous combustion products : Decomposition products may include the following materials: carbon oxides

5.3 Advice for firefighters

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. Fire will produce dense black smoke. Exposure to decomposition products may cause a health hazard. Cool closed containers exposed to fire with water. Do not release runoff from fire to drains or watercourses. 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

Exclude sources of ignition and be aware of explosion hazard. Ventilate the area. Avoid breathing vapor or mist. Refer to protective measures listed in sections 7 and 8. No action shall be taken involving any personal risk or without suitable training. If the product contaminates lakes, rivers, or sewers, inform the appropriate authorities in accordance with local regulations.

6.2 Environmental precautions

Avoid dispersal of spilled 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 materials for containment and cleaning up

Stop leak if without risk. Move containers from spill area. Approach 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). Use spark-proof tools and explosion-proof equipment. Contaminated absorbent material may pose the same hazard as the spilled product.

6.4 Reference to other sections



SECTION 6: Accidental release measures

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

7.1 Precautions for safe handling

Vapors are heavier than air and may spread along floors. Vapors may form explosive mixtures with air. Prevent the creation of flammable or explosive concentrations of vapors in air and avoid vapor concentrations higher than the occupational exposure limits. In addition, the product should be used only in areas from which all naked lights and other sources of ignition have been excluded. Electrical equipment should be protected to the appropriate standard. To dissipate static electricity during transfer, ground drum and connect to receiving container with bonding strap. No sparking tools should be used.

Avoid inhalation of vapour, dust and spray mist. Avoid contact with skin and eyes. Eating, drinking and smoking should be prohibited in area where this material is handled, stored and processed. Appropriate personal protective equipment: see Section 8. Always keep in containers made from the same material as the original one.

7.2 Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations for flammable liquids. Store in a cool, well-ventilated area away from incompatible materials and ignition sources. Keep out of the reach of children. Keep away from: Oxidizing agents, strong alkalis, strong acids. No smoking. Prevent unauthorized access. Containers that are opened must be carefully resealed and kept upright to prevent leakage.

7.3 Specific end use(s)

See separate Product Data Sheet for recommendations or industrial sector specific solutions.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Product/ingredient name	Exposure limit values
xylene	NZ OSH (New Zealand, 2/2013). WES-TWA: 217 mg/m ³ 8 hours. WES-TWA: 50 ppm 8 hours.
phthalic anhydride	NZ OSH (New Zealand, 2/2013). Skin sensitizer. WES-TWA: 16.1 mg/m ³ 8 hours. WES-TWA: 1 ppm 8 hours.
cobalt(2+) salts of C6-19 branched fatty acids	EH40/2005 WELs (United Kingdom (UK), 12/2011). Skin sensitizer. TWA: 0.1 mg/m ³ , (as Co) 8 hours.
zirconium octoate	NZ OSH (New Zealand, 2/2013). WES-TWA: 5 mg/m ³ , (as Zr) 8 hours. WES-STEL: 10 mg/m ³ , (as Zr) 15 minutes.
ethylbenzene	NZ OSH (New Zealand, 2/2013). WES-STEL: 543 mg/m ³ 15 minutes. WES-STEL: 125 ppm 15 minutes. WES-TWA: 434 mg/m ³ 8 hours. WES-TWA: 100 ppm 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 appropriate monitoring standards. Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

8.2 Exposure controls

Appropriate engineering controls

Arrange sufficient ventilation by local exhaust ventilation and good general ventilation to keep the airborne concentrations of vapors or dust lowest possible and below their respective threshold limit value. Ensure that eyewash stations and safety showers are proximal to the work-station location.

Individual protection measures

General :

Gloves must be worn for all work that may result in soiling. Apron/coveralls/protective clothing must be worn when soiling is so great that regular work clothes do not adequately protect skin against contact with the product. Safety eyewear should be used when there is a likelihood of exposure.



SECTION 8: Exposure controls/personal protection



Hygiene measures :

Wash hands, forearms, and face thoroughly after handling compounds and before eating, smoking, using lavatory, and at the end of day.

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.

Hand protection :

Wear chemical-resistant gloves (tested to EN374) in combination with 'basic' employee training. The quality of the chemical-resistant protective gloves must be chosen as a function of the specific workplace concentrations and quantity of hazardous substances.

Since the actual work situation is unknown. Supplier of gloves should be contacted in order to find the appropriate type. Below listed glove(s) should be regarded as generic advice:

Recommended: Silver Shield / 4H gloves, nitrile rubber, polyvinyl alcohol (PVA), Viton®

Not recommended: neoprene rubber, butyl rubber, natural rubber (latex), polyvinyl chloride (PVC)

Body protection :

Personal protective equipment for the body should be selected based on the task being performed and the risks involved handling this product.

Wear suitable protective clothing. Always wear protective clothing when spraying.

Respiratory protection :

If working areas have insufficient ventilation: When the product is applied by means that will not generate an aerosol such as, brush or roller wear half or totally covering mask equipped with gas filter of type A, when grinding use particle filter of type P. When the product is applied by spraying and for continuous or prolonged work always wear an air-fed respirator e.g. hood with supply of fresh or compressed air or a full face, powered air purifying filter. Be sure to use an approved/certified respirator or equivalent.

Environmental exposure controls

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

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state :

Liquid.

Odor :

Solvent-like

pH :

Testing not relevant or not possible due to nature of the product.

Melting point/freezing point :

Testing not relevant or not possible due to nature of the product.

Boiling point/boiling range :

Testing not relevant or not possible due to nature of the product.

Flash point :

Closed cup: 39°C (102.2°F)

Evaporation rate :

Testing not relevant or not possible due to nature of the product.

Flammability :

Flammable in the presence of the following materials or conditions: open flames, sparks and static discharge and heat.

Lower and upper explosive (flammable) limits :

0.6 - 7.6 vol %

Vapor pressure :

Testing not relevant or not possible due to nature of the product.

Vapor density :

Testing not relevant or not possible due to nature of the product.

Relative density :

0.922 g/cm³

Solubility(ies) :

Insoluble in the following materials: cold water and hot water.

Partition coefficient (LogKow) :

Testing not relevant or not possible due to nature of the product.

Auto-ignition temperature :

Testing not relevant or not possible due to nature of the product.

Decomposition temperature :

Testing not relevant or not possible due to nature of the product.

Viscosity :

Testing not relevant or not possible due to nature of the product.



SECTION 9: Physical and chemical properties

Explosive properties : Explosive in the presence of the following materials or conditions: open flames, sparks and static discharge and heat.

Oxidizing properties : Testing not relevant or not possible due to nature of the product.

9.2 Other information

Solvent(s) % by weight : Weighted average: 45 %

Water % by weight : Weighted average: 0 %

VOC content : 414.7 g/l

TOC Content : Weighted average: 359 g/l

Solvent Gas : Weighted average: 0.071 m³/l

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 pressurize, 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.
Slightly reactive or incompatible with the following materials: reducing materials.

10.6 Hazardous decomposition products

When exposed to high temperatures (i.e. in case of fire) harmful decomposition products may be formed:

Decomposition products may include the following materials: carbon oxides

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Exposure to component solvent vapor concentrations 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. Solvents may cause some of the above effects by absorption through the skin. Symptoms and signs include headaches, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, loss of consciousness. Repeated or prolonged contact with the preparation 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. Accidental swallowing may cause stomach pain. Chemical lung inflammation may occur if the product is taken into the lungs via vomiting.

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
naphtha (petroleum), hydrotreated heavy	LC50 Inhalation Vapor	Rat	8500 mg/m ³	4 hours
derivative of benzotriazol	LD50 Oral	Rat	>2000 mg/kg	-
	LD50 Dermal	Rat	>2000 mg/kg	-
phthalic anhydride	LD50 Oral	Rat	>5000 mg/kg	-
2-butanone oxime	LD50 Oral	Rat	1530 mg/kg	-
	LD50 Dermal	Rabbit	1001 mg/kg	-
bis (1,2,2,6,6-pentamethyl-4-piperidyl) sebacate	LD50 Oral	Rat	930 mg/kg	-
	LD50 Dermal	Rat	>2000 mg/kg	-
	LD50 Oral	Rat	>2000 mg/kg	-

**SECTION 11: Toxicological information**

zirconium octoate	LC50 Inhalation Dusts and mists LD50 Dermal LD50 Oral	Rat Rabbit Rat	>8800 mg/m ³ >2000 mg/kg >2000 mg/kg	1 hours - -
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Acute toxicity estimates

Route	ATE value
No known significant effects or critical hazards.	

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure
phthalic anhydride 2-butanone oxime	Eyes - Moderate irritant Eyes - Severe irritant	Rabbit Rabbit	- -	24 hours 50 milligrams 100 microliters

Sensitizer

Product/ingredient name	Route of exposure	Species	Result
derivative of benzotriazol bis (1,2,2,6, 6-pentamethyl-4-piperidyl) sebacate	skin skin	Guinea pig Guinea pig	Sensitizing Sensitizing

Specific target organ toxicity (single exposure)

Product/ingredient name	Category	Route of exposure	Target organs
naphtha (petroleum), hydrotreated heavy phthalic anhydride	Category 3 Category 3	Not applicable. Not applicable.	Narcotic effects Respiratory tract irritation

Specific target organ toxicity (repeated exposure)

Product/ingredient name	Category	Route of exposure	Target organs
Not available.			

Aspiration hazard

Product/ingredient name	Result
white spirit naphtha (petroleum), hydrotreated heavy	ASPIRATION HAZARD - Category 1 ASPIRATION HAZARD - Category 1

Information on the likely routes of exposure

Routes of entry anticipated: Oral, Dermal, Inhalation.

Potential chronic health effects

Product/ingredient name	Carcinogenic effects	Mutagenic effects	Developmental effects	Fertility effects
2-butanone oxime zirconium octoate	Carc. 2, H351 -	-	- Repr. 2, H361d	- Repr. 2, H361f

Sensitization :

Contains derivative of benzotriazol, phthalic anhydride, 2-butanone oxime, bis (1,2,2,6, 6-pentamethyl-4-piperidyl) sebacate, cobalt(2+) salts of C6-19 branched fatty acids. May produce an allergic reaction.

Other information :

No additional known significant effects or critical hazards.

SECTION 12: Ecological information**12.1 Toxicity**

Do not allow to enter drains or watercourses. Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Product/ingredient name	Result	Species	Exposure
derivative of benzotriazol bis (1,2,2,6, 6-pentamethyl-4-piperidyl) sebacate	Acute EC50 >9 mg/l Acute LC50 4 mg/l Acute LC50 2.8 mg/l Acute EC50 1.68 mg/l Acute LC50 0.97 mg/l Fresh water	Algae Daphnia Fish Aquatic plants Fish - Lepomis macrochirus	72 hours 48 hours 96 hours 72 hours 96 hours



SECTION 12: Ecological information

12.2 Persistence and degradability

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
derivative of benzotriazol	-	-	Not readily

12.3 Bioaccumulative potential

Product/ingredient name	LogP _{ow}	BCF	Potential
naphtha (petroleum), hydrotreated heavy phthalic anhydride 2-butanone oxime	- 1.6 0.63	10 - 2500 3.4 2.5 - 5.8	high low low

12.4 Mobility in soil

Soil/water partition coefficient

(K_{oc}) :

Mobility :

No known data available in our database.

No known data available in our database.

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

13.1 Waste treatment methods

The generation of waste should be avoided or minimized wherever possible.

Residues of the product is listed as hazardous waste. Dispose of according to all state and local applicable regulations.

Spillage, remains, discarded clothes and similar should be discarded in a fireproof container.

Packaging

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

SECTION 14: Transport information

Transport may take place according to national regulation NZS for transport by road and train, IMDG for transport by sea, IATA for transport by air.

14.1 UN no.	14.2 Proper shipping name	14.3 Transport hazard class(es)	14.4 PG*	14.5 Env* Additional information
NZS Class	UN1263 PAINT	3  	III	Yes. <u>Hazchem code</u> 3Y
IMDG Class	UN1263 PAINT. (white spirit)	3  	III	Yes. <u>Emergency schedules</u> (EmS) F-E, S-E
IATA Class	UN1263 PAINT	3  	III	Yes. -

PG* : Packing group

Env.* : Environmental hazards

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.



0208000000

SECTION 14: Transport information

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable.

SECTION 15: Regulatory information

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

This material is classified as hazardous according to criteria in the Hazardous Substances (Minimum Degrees of Hazard) Regulations 2001 and has been classified according to the Hazardous Substances (Classifications) Regulations 2001.

This material is classified as a dangerous good according to criteria in New Zealand Standard 5433:2007 Transport of Dangerous Goods on Land.

HSNO Classification

3.1 - FLAMMABLE LIQUIDS - Category C
6.5 - SENSITIZATION - Category A (Respiratory)
6.5 - SENSITIZATION - Category B (Skin)
6.7 - CARCINOGENICITY - Category B
6.8 - REPRODUCTIVE AND DEVELOPMENTAL TOXICITY [Fertility] - Category B
6.8 - REPRODUCTIVE AND DEVELOPMENTAL TOXICITY [Unborn child] - Category B
9.1 - AQUATIC ECOTOXICITY - Category B

Safety, health and environmental regulations specific for the product :

No known specific national and/or regional regulations applicable to this product (including its ingredients).

HSNO Group Standard : HSR002662

HSNO Group Standard assinged are based upon the GHS Classification.

SECTION 16: Other information

 Indicates information that has changed from previously issued version.

Classification	Justification
FLAMMABLE LIQUIDS - Category 3 AQUATIC TOXICITY (CHRONIC) - Category 2	On basis of test data Calculation method

Notice to reader

The information contained in this safety data sheet is based on the present state of knowledge and EU and national legislation. It provides guidance on health, safety and environmental aspects for handling the product in a safe way and should not be construed as any guarantee of the technical preformance or suitability for particular applications.

It is always the duty of the user/employer to ascertain that the work is planned and carried out in accordance with the national regulations.