



SAFETY DATA SHEET

Ryon-Märk GIGANT, Ryon-Märk MEDIUM

In accordance with Commission Regulation (EU) 2020/878 of 18 June 2020 amending Annex II to Reach

Issue date 2023/03/09

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier

Trade name: Ryon-Märk GIGANT **Product code:** 101 (black)

Trade name: Ryon-Märk MEDIUM, **Product code:** 111 (black)

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

Use: Solvent-based marker. Professional use only.

Uses advised against: Other applications than above mentioned are advised against

1.3 Details of the supplier of the safety data sheet

Ryon-Märk AB

Bodarna 6

SE-825 32 Iggesund, Sweden

Phone: +46 (0)650 933 70

E-mail: info@ryonmark.se

Website: <http://ryonmark.se/>

Contact person: Liselotte Lättman

1.4 Emergency telephone number

Only emergency call number: 111 (NHS) For poisoning emergencies in UK

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Flam. Liq. 3; H226

Asp. Tox. 1; H304

Acute tox. 4; H312

Acute tox. 4; H332

Skin Irrit. 2; H315

Eye Irrit. 2; H319

Muta. 2; H341

STOT SE 3; H335

STOT RE 2; H373

Flammable liquid and vapour. May be fatal if swallowed and enters airways. Harmful in contact with skin or if inhaled. Causes skin irritation. Causes serious eye irritation. May cause respiratory irritation. Suspected of causing genetic defects. May cause damage to organs (the central nervous system) through prolonged or repeated exposure.

Classification procedure: Calculation method.

2.2 Label elements



Signal word: Warning

Contains xylene and black pigment (Solvent Black 3)



SAFETY DATA SHEET

Ryon-Märk GIGANT, Ryon-Märk MEDIUM

In accordance with Commission Regulation (EU) 2020/878 of 18 June 2020 amending Annex II to Reach

Hazard statements:

H226 Flammable liquid and vapour.
H312 + H332 Harmful in contact with skin or if inhaled.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H335 May cause respiratory irritation.
H341 Suspected of causing genetic defects.
H373 May cause damage to organs through prolonged or repeated exposure.

Precautionary statements:

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P261 Avoid breathing vapours.
P302+P352 IF ON SKIN: Wash with plenty of soap and water.
P312 Call a POISON CENTER or doctor / physician if you feel unwell.
P403+P235 Store in a well-ventilated place. Keep cool.

Labeling of packages whose content does not exceed 125 ml:

According to 1.5.2.1.1 of Annex I to CLP, the text for the following statements can be omitted:
H226, P210, P403 + P235, H315, H319

There is no free liquid in the marker, so there is no aspiration hazard of liquid into the lungs.
H304 has therefore been omitted from the labeling information.

2.3 Other hazards

The chemical contains no PBT or vPvB substances.
The chemical does not contain any known or suspected endocrine disruptors.

3. COMPOSITION / INFORMATION ON INGREDIENTS

3.2 Mixtures

<i>Substance</i>	<i>CAS-nr</i>	<i>EC No</i>	<i>Conc.(%)</i>	<i>Classification</i>
<i>Xylene</i>	<i>CAS No: 1330-20-7</i> <i>EC No: 215-535-7</i> <i>Index No: 601-022-00-9</i> <i>REACH reg. No:</i> <i>01-2119488216-32</i>		<i>60 - 75 %</i>	<i>Flam. Liq. 3; H226</i> <i>Asp. Tox. 1; H304</i> <i>Acute tox. 4; H312, H332</i> <i>Skin Irrit. 2; H315</i> <i>Eye Irrit.2; H319</i> <i>STOT SE 3; H335</i> <i>STOT RE 2; H373</i> <i>LC50 (6 h): 15,7 mg/l</i>
<i>Acetone</i>	<i>CAS No: 67-64-1</i> <i>EC No: 200-662-2</i> <i>Inde Nor: 606-001-00-8</i> <i>REACH reg. No:</i> <i>01-2119471330-49</i>		<i>20 - 30 %</i>	<i>Flam. Liq. 2;H225</i> <i>Eye Irrit. 2;H319</i> <i>STOT SE 3;H336</i> <i>EUH066</i>
<i>Pigment (2,3-dihydro-2,2-dimethyl-6-((4-(phenylazo)-1-naphthyl)azo)perimidine)</i>	<i>CAS No: 4197-25-5</i> <i>EC No: 224-087-1</i>		<i>5 - 15 %</i>	<i>Muta. 2; H341</i>

The xylene in the mixture is a UVCB substance that includes ortho-, meta-, para-xylene and ethylbenzene.
See section 16 for explanation of hazard classes and hazard statements above.



SAFETY DATA SHEET

Ryon-Märk GIGANT, Ryon-Märk MEDIUM

In accordance with Commission Regulation (EU) 2020/878 of 18 June 2020 amending Annex II to Reach

4. FIRST AID MEASURES

4.1 Description of first aid measures

Generally: Contact a POISON INFORMATION CENTER or doctor if symptoms persist.

After inhalation: Fresh air and rest.

After skin contact: Remove contaminated clothing and wash skin with soap and water. Then apply skin cream to re-moisturize the skin.

After eye contact: Promptly rinse eyes with plenty of water (tempered at 20-30°C) for at least 5 minutes. Keep the eyelids wide apart while rinsing. Remove any contact lenses if possible.

After swallowing: Ingestion is not likely due to the shape of the product (there is no free liquid in the marker).

4.2 Most important symptoms and effects, both acute and delayed

Inhalation can irritate the airways and cause headache, dizziness, nausea and has a sedating effect.

Skin contact degrades the skin and causes itching and redness. Exposure to a large skin surface can produce similar symptoms as for inhalation.

The vapors can cause itching, redness and tearing in the eyes.

Ingestion of free liquid may cause aspiration risk to the lungs, but the marker does not contain free liquid.

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

5. FIREFIGHTING MEASURES

5.1 Extinguishing media

All common fire extinguishing agents may be used, choose a fire-extinguishing media that is appropriate for the surrounding materials. Do not use full water jet as this may spread the fire.

5.2 Special hazards arising from the substance or mixture

Flammable. Markers can burst violently when heated, due to excess pressure build-up. Fire smoke may contain harmful or irritating gases i.e. carbon oxides.

5.3 Advice for firefighters

Firefighters who may be exposed to smoke or thermal decomposition products shall wear all available personal protective equipment and self-contained breathing apparatus. Extinguishing water must not be discharged into drains. Extinguishing water must be disposed of in accordance with local regulations.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

No special measures are needed for intended handling.

6.2 Environmental precautions

Do not allow to enter into sewer, water system or soil.

6.3 Methods and material for containment and cleaning up

Markers are picked up mechanically / by hand.

6.4 Reference to other sections

See also sections 7 (handling), 8 (personal protection) and 13 (waste disposal).

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Provide adequate ventilation. Avoid inhalation of vapours and contact with skin and eyes. Wash your hands after contact with the product. Do not eat, drink or smoke while working.



SAFETY DATA SHEET

Ryon-Märk GIGANT, Ryon-Märk MEDIUM

In accordance with Commission Regulation (EU) 2020/878 of 18 June 2020 amending Annex II to Reach

7.2 Conditions for safe storage, including any incompatibilities

Keep out of the reach of children. Store in a well-ventilated place, protected from heat sources and direct sunlight. Stored separately from food and animal feed.

7.3 Specific end use(s)

See section 1.2.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters

<i>Substance</i>	<i>Identification</i>	<i>Value</i>	<i>Notation</i>
Xylene	CAS No 1330-20-7 EC No 215-535-7	TWA (8h): 50 ppm	Sk
		TWA (8h): 220 mg/m ³	
		STEL (15 min.): 100 ppm	
		STEL (15 min.): 441 mg/m ³	
Acetone	CAS No 67-64-1 EC No 200-662-2	TWA (8h): 500 ppm	
		TWA (8h): 1210 mg/m ³	
		STEL (15 min.): 1500 ppm	
		STEL (15 min.): 3620 mg/m ³	

References (laws/regulations): EH40/2005 Workplace exposure limits, with later amendments.

Explanation of the notations:

Sk = Can be absorbed through the skin.

Xylene:

DNEL Workers, short-term - systemic effects, inhalation: 289 mg/m³

DNEL Workers, short-term - local effects, inhalation: 289 mg/m³

DNEL Workers, long-term - systemic effects, skin contact: 180 mg/kg body weight/day

DNEL Workers, long-term - systemic effects, inhalation: 77 mg/m³

PNEC Fresh water: 0.327 mg/l

PNEC Sea water: 0.327 mg/l

PNEC Intermittent emissions: 0.327 mg/l

PNEC Sewage treatment plant: 6.58 mg/l

PNEC Freshwater sediment related to dry weight: 12.46 mg/kg

PNEC Marine sediment related to dry weight: 12.46 mg/kg

PNEC Soil related to dry weight: 2.31 mg/kg

Acetone:

DNEL Workers, long-term - systemic effects, skin contact: 186 mg/kg body weight/day

DNEL Workers, long-term - systemic effects, inhalation: 1210 mg/m³

DNEL Workers, short-term - local effects, inhalation: 2420 mg/m³

PNEC Fresh water: 10.6 mg/l

PNEC Sea water: 1.06 mg/l

PNEC Intermittent emissions: 21 mg/l

PNEC Sewage treatment plant: 100 mg/l

PNEC Freshwater sediment: 30.4 mg/kg

PNEC Marine sediment: 3.04 mg/kg

PNEC Soil: 29.5 mg/kg

8.2 Exposure controls

Provide adequate ventilation. The personal protective equipment must be CE-marked. The protective equipment and the specified standards recommended below are only suggestions, and should be selected on advice from the supplier of such equipment. A risk assessment of the work place/work activities (the actual



SAFETY DATA SHEET

Ryon-Märk GIGANT, Ryon-Märk MEDIUM

In accordance with Commission Regulation (EU) 2020/878 of 18 June 2020 amending Annex II to Reach

risk) may lead to other control measures.

Eye / face protection

Normally not necessary.

Hand and skin protection

Normally not necessary.

Wear gloves of resistant material, eg. Viton (thickness of glove material 0,4 mm $\geq$ 480 minutes breakthrough time).

Standards:

EN ISO 374 (Protective gloves against chemicals and micro-organisms).

EN 420 (Protective gloves - General requirements and test methods).

Ordinary workwear.

When handling spilled liquid: Wear rubber apron and rubber footwear.

Respiratory protection

Under normal conditions of use respiration protection should not be required.

In case of insufficient ventilation, wear a face mask with gas filter A (organic vapor filter).

Standard:

EN 14387 (Respiratory protective devices. Gas filter(s) and combined filter(s). Requirements, testing, marking).

Appropriate environmental exposure control

Do not allow to enter into sewer, water system or soil.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Physical state	Liquid
Colour	Black
Odour	Aromatic / sweet
Odour threshold	0.7 – 40 ppm (literature data)
Melting point	-25 °C (applies to xylene)
Boiling point	Not determined
Flammability	Flammable liquid and vapor
Lower and upper explosion limit	1-13 % by volume in air (estimated value, literature data)
Flash point	> 23 °C
Autoignition temperature	Not determined
Decomposition temperature	Not determined
pH (in delivered state)	Not relevant
Kinematic viscosity	Not determined
Solubility in water	Insoluble
Partition coefficient n- octanol/water	Not relevant for a mixture
Vapour pressure (20°C)	Not determined
Density (20°C)	< 1 g/ml
Relative vapour density	> 1 (reference gas: air = 1)
Particle characteristics	Not relevant for a liquid
Evaporation rate	Negligible

9.2 Other information

9.2.1. Information with regard to physical hazard classes

Explosive properties Not explosive

Oxidizing properties Non-oxidizing



SAFETY DATA SHEET

Ryon-Märk GIGANT, Ryon-Märk MEDIUM

In accordance with Commission Regulation (EU) 2020/878 of 18 June 2020 amending Annex II to Reach

9.2.2 Other safety characteristics

No information.

10 STABILITY AND REACTIVITY

10.1 Reactivity

No test data available.

10.2 Chemical stability

Stable under normal temperature conditions and recommended use.

10.3 Possibility of hazardous reactions

None under normal conditions.

10.4 Conditions to avoid

Avoid heat, flames and other sources of ignition.

10.5. Incompatible materials

None special.

10.6. Hazardous decomposition products

None under normal conditions. See also section 5.2 (combustion products).

11. TOXICOLOGICAL INFORMATION

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

ortho-Xylene: LC50 (inhalation, rat, 4h): < 19 mg/l. Poisoning by inhalation: LC50 15.7 mg/l (6h)

meta-Xylene: LC50 (inhalation, rat, 4h): <29 mg/l

para-Xylene: LC50 (inhalation, rat, 4h): 20 mg/l

The test data available for ortho-, meta- and para-xylene do not support the substances' classification with Acute Tox. 4 through ingestion or skin contact.

ATE mixture (oral): > 2000 mg/kg. ATE mixture (dermal): > 2000 mg/kg

Acute toxicity

Harmful in contact with skin or if inhaled.

Skin corrosion /skin irritation

Causes skin irritation.

Serious eye damage or eye irritation

Causes serious eye irritation.

Respiratory or skin sensitization

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

Germ cell mutagenicity

Suspected of causing genetic defects (positive test result in laboratory tests).

Cancerogenicity

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

Reproductive toxicity

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



SAFETY DATA SHEET

Ryon-Märk GIGANT, Ryon-Märk MEDIUM

In accordance with Commission Regulation (EU) 2020/878 of 18 June 2020 amending Annex II to Reach

Specific target organ toxicity – single exposure

May cause respiratory irritation.

Specific target organ toxicity – repeated exposure

May cause damage to organs (the central nervous system) through prolonged or repeated exposure.

Aspiration hazard

May be fatal if swallowed and enters airways. However, ingestion is unlikely due to the shape of the product (there is no free liquid in the marker).

Information on likely routes of exposure

Exposure can occur via skin contact or inhalation.

Symptoms related to the physical, chemical and toxicological characteristics

Inhalation can irritate the airways and cause headache, dizziness, nausea and has a sedating effect.

Skin contact degrades the skin and causes itching and redness. Exposure to a large skin surface can produce similar symptoms as from inhalation.

The vapors can cause itching, redness and tearing in the eyes.

11.2. Information on other hazards

Endocrine disrupting properties: The chemical does not contain any known or suspected endocrine disruptors to human. *Other information:* No data.

12. ECOLOGICAL INFORMATION

12.1 Ecotoxicity

The mixture is not classified as harmful to the environment.

12.2 Persistence and degradability

Xylene and acetone are readily biodegradable.

12.3 Bioaccumulative potential

Xylene and acetone do not bioaccumulate.

12.4 Mobility in soil

The product contains organic solvents which will evaporate easily from all surfaces.

12.5 Results of PBT-/vPvB assessment

The chemical contains no PBT or vPvB substances.

12.6. Endocrine disrupting properties

The chemical does not contain any known or suspected endocrine disruptors for the environment.

12.7. Other adverse effects

None known.

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Do not empty into drains. Dispose of residues / unused markers as hazardous waste.

Waste code (EWC):

080111 waste paint and varnish containing organic solvents or other dangerous substances

The waste code is intended as a guide. The code must be chosen by the user, if the use differs from the one mentioned above.

Used /dry / empty markers are not hazardous waste.



SAFETY DATA SHEET

Ryon-Märk GIGANT, Ryon-Märk MEDIUM

In accordance with Commission Regulation (EU) 2020/878 of 18 June 2020 amending Annex II to Reach

14. TRANSPORT INFORMATION

14.1 UN Number or ID number	1263
14.2 UN proper shipping name	Paint
14.3 Transport hazard class	3
14.4 Packing group	III
14.5 Marine pollutant	No
14.6 Special precautions for user	Fp > 23 °C c.c. (IMDG) At the highest net quantity 30 ml per inner packaging and 1000 ml per outer packaging, the goods are not covered by all ADR regulations
14.7 Maritime transport in bulk according to IMO instruments	Not relevant

15. REGULATORY INFORMATION

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

Regulation (EC) No 1907/2006 on the registration, evaluation, authorization and restriction of chemicals (REACH Regulation), with later amendments.

Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures (CLP-regulation) with later amendments.

European Waste Catalogue and Hazardous Waste List.

The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2009.

Restrictions of the mixture according to Annex XVII to Reach:

None.

15.2 Chemical safety assessment

Not required for mixtures.

16. OTHER INFORMATION

The information contained in this SDS must be made available to all those who handle the product.

Explanation of hazard classes used in section 3.2

Acute Tox. 4	- Acute toxicity, category 4
Asp. Tox. 1	- Aspiration hazard, category 1
Eye Irrit. 2	- Serious eye damage/eye irritation, category 2
Flam. Liq. 2	- Flammable liquids, category 2
Flam. Liq. 3	- Flammable liquids, category 3
Muta. 2	- Germ cell mutagenicity, category 2
Skin Irrit. 2	- Skin corrosion/irritation, category 2
STOT RE 2	- Specific target organ toxicity — repeated exposure, category 2
STOT SE 3	- Specific target organ toxicity — single exposure, category 3

Explanation of hazard statements used in section 3.2

H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H312	Harmful in contact with skin.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H341	Suspected of causing genetic defects.



SAFETY DATA SHEET

Ryon-Märk GIGANT, Ryon-Märk MEDIUM

In accordance with Commission Regulation (EU) 2020/878 of 18 June 2020 amending Annex II to Reach

H373	May cause damage to organs through prolonged or repeated exposure
EUH066	Repeated exposure may cause skin dryness or cracking.

Abbreviations and acronyms used

ATE: Acute Toxicity Estimate

DNEL: Derived no effect level

EWC: European Waste Code (a code from the EU's common classification system for waste)

LC50: Lethal concentration of a substance which causes the death of 50% of test animals

LD50: Lethal dose, is the amount of a substance given to a group of test animals, which causes the death of 50%.

Log Pow: The partition coefficient n-octanol-water

PBT: Persistent, Bioaccumulative and Toxic

PNEC: Predicted no effect concentration

vPvB: very Persistent and very Bioaccumulative

Version: 1