1 | General Information and Overview

Product		Risk assessor	
Product name:	Helmet for mountaineering	Organisation:	
Product category:	Personal protective equipment	Country:	COUNTRIES.NAME_
Description:	This is a PROSAFE risk assessment template for helmets for mountaineers falling under the European Standard EN 12492:2012. It describes two likely injury scenarios for such products: - Clause 4.2.1: Shock absorption - Clause 4.2.2: Penetration How to use Users of the template should select the scenario(s) corresponding to the non-conformities identified for the product under assessment. All other scenarios can then be deleted. The probabilities are estimated in the remaining scenarios. The scenarios presented in the template are likely scenarios. Users should ensure that the scenarios are suitable, that the steps are correct and that the injury level is appropriate. Before finalising the risk assessment, users are reminded to do a sensitivity analysis to check the robustness of the results. Disclaimer: The template has been developed by a Joint Action working group composed of market surveillance experts. The intention is to support market surveillance officials assessing the risk with a particular product as part of a market surveillance case. The template is not authorized or endorsed in any way and it is not binding for Member State market surveillance authorities. The contents of the original		

Product	Risk assessor
template is subject to change without notice. Disclaimer: This Risk Assessment Template arises from the Joint Market Surveillance Action on GPSD Products – JA2016, which received funding from the European Union in the framework of the 'Programme of Community Action in the field of Consumer Policy (2014-2020)'. The content of this document represents the views of the author only and it is his sole responsibility; it cannot be considered to reflect the views of the European Commission and/or the Consumers, Health, Agriculture and Food Executive Agency or any other body of the European Union. The European Commission and the Agency do not accept any responsibility for use that may be made of the information it contains.	

2 | Product risks - Overview

Scenario 1 :	To be determined - The helmet does not comply with EN 12492:2012, clause 4.2.1 and has inadequate shock absorption capacity. The climber uses the helmet for mountaineering. During climbing, a big stone falls down from above and hits the climber on the helmet. The blow isn't fully absorbed by the helmet but is transmitted to the climber's skull. The climber gets a skull fracture and becomes unconscious.
Scenario 2 :	To be determined - The helmet does not comply with EN 12492:2012, clause 4.2.2 and has inadequate penetration resistance. The climber uses the helmet for mountaineering. During climbing, a big stone with a sharp edge falls down from above and hits the climber on the helmet. The stone penetrates the shell of the helmet. The climber gets a skull fracture and becomes unconscious.

Scenario 1 : Other consumers - High position of user

1 | Product hazard

Hazard Group: **Potential energy**

Hazard Type: **High position of user**

2 | Consumer

Consumer type: **Other consumers - Consumers other than vulnerable or very vulnerable consumers**

3 | How the hazard causes an injury to the consumer

Injury scenario: **The helmet does not comply with EN 12492:2012, clause 4.2.1 and has inadequate shock absorption capacity. The climber uses the helmet for mountaineering. During climbing, a big stone falls down from above and hits the climber on the helmet. The blow isn't fully absorbed by the helmet but is transmitted to the climber's skull. The climber gets a skull fracture and becomes unconscious.**

4 | Severity of Injury

Injury: **Fracture**

Level: **3 Ankle, Leg (femur and lower leg), Hip, Thigh, Skull, Spine (minor compression fracture), Jaw (severe), Larynx, Multiple rib fractures, Blood or air in chest**

5 | Probability of the steps to injury

Step	Step(s) to Injury	Probability
1	The helmet does not comply with EN 12492:2012, clause 4.2.1 and has inadequate shock absorption capacity.	1
2	The climber uses the helmet for mountaineering.	1
3	During climbing, a big stone falls down from above and hits the climber on the helmet in such a way that the blow isn't fully absorbed by the helmet but is transmitted to the climber's skull. (The probability can be estimated from the helmet's actual absorption capacity as measured in the laboratory test.)	0
4	The climber gets a skull fracture and becomes unconscious. (The probabilty and the outcome depends upon the actual absorption capacity and the location of the weak point on the helmet. These can be found in the report from the laboratory test. Different outcomes may be possible and should be analysed.)	0

Calculated probability	Overall probability	Risk of this scenario
To be determined	To be determined	Risk to be determined

Scenario 2 : Other consumers - High position of user

1 | Product hazard

Hazard Group: **Potential energy**

Hazard Type: **High position of user**

2 | Consumer

Consumer type: **Other consumers - Consumers other than vulnerable or very vulnerable consumers**

3 | How the hazard causes an injury to the consumer

Injury scenario: **The helmet does not comply with EN 12492:2012, clause 4.2.2 and has inadequate penetration resistance. The climber uses the helmet for mountaineering. During climbing, a big stone with a sharp edge falls down from above and hits the climber on the helmet. The stone penetrates the shell of the helmet. The climber gets a skull fracture and becomes unconscious.**

4 | Severity of Injury

Injury: **Fracture**

Level: **3 Ankle, Leg (femur and lower leg), Hip, Thigh, Skull, Spine (minor compression fracture), Jaw (severe), Larynx, Multiple rib fractures, Blood or air in chest**

5 | Probability of the steps to injury

Step	Step(s) to Injury	Probability
1	The helmet does not comply with EN 12492:2012, clause 4.2.2 and has inadequate penetration resistance.	1
2	The climber uses the helmet for mountaineering.	1
3	During climbing, a big stone with a sharp edge falls down from above, hits the climber on the helmet so that it penetrates the helmet. (The probability can be estimated from the actual penetration force as measured in the laboratory test.)	0
4	The climber gets a skull fracture and becomes unconscious. (The probability depends upon the location of the weak points. This can be seen from the laboratory test report. Other outcomes with different probabilities may be possible depending upon the specific product. They should also be considered.)	0

Calculated probability	Overall probability	Risk of this scenario
To be determined	To be determined	Risk to be determined