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Rijksinstituut voor Volksgezondheid en Milieu Ministerie van Volksgezondheid, Welzijn en Sport

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MONITORING AND CHECKING COMPLIANCE (CHAPTER 4)

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How to comply with REACH Restriction 71, guideline for users of NMP (1-methyl-2-pyrrolidone)

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Checking compliance: REACH and OSH

REACH	OSH
EU Regulation	National legislation, based on Chemical Agents Directive
Registrant assesses safe use in the supply chain in CSA (> 10 tpa) - DNEL is applicable limit	Employer assesses workplace risks, using info from supplier - OEL is applicable limit
Supplier advices DU on safe use in (E)SDS	Employer selects proper RMMs according to STOP-principle
DU follows safe use advice in (E)SDS or does own assessment	Regular checks if RMMs are functioning properly



Compliance with REACH

Follow exposure scenario:

- Check if operational conditions agree with your use
- Apply risk management measures according to ES

If OCs and/or RMMs differ:

- Inform your supplier
- Scaling may be possible
- Downstream user chemical safety assessment

Use not covered or no ES information received:

- Ask your supplier
- Downstream user chemical safety assessment



Compliance with OSH

Exposure as low as reasonably achievable Some countries may have stricter legislation for reprotoxic substances

Check with your local authorities (Labour Inspectorate)

Workplace Risk Assessment:

- Measurements (in some countries mandatory), use standards
- Modelling (accepted in some countries)
- Take into account multiple tasks and/or co-exposure to chemicals with similar effects

STOP-principle: Substitution, Technical/engineering controls, Organisational measures, PPE

Pay attention to: worker training, correct use and maintenance of RMMs, emergency plans



Monitoring

Reasons for monitoring:

- May be required in workplace assessment
- As part of (DU) CSA
- To demonstrate compliance with the DNEL

Dermal exposure: very relevant for NMP Monitoring dermal exposure is difficult \rightarrow biological monitoring can give additional information on total NMP exposure

Consult with your occupational hygienist before doing measurements For biological monitoring, involve occupational physician

Right to refuse biological monitoring



Monitoring to show compliance with DNEL

Air monitoring methods: see Appendix 2 of Guideline for details

- NIOSH Method 1302
- OSHA PV2043
- MAK method 1 (Rosenberger et al., 2014)
- MAK method 2 (Breuer et al. 2015)

Standards: see Chapter 4 of Guideline for links

- EN 689
- BOHS-NVvA Guideline (UK, Netherlands)
- TRGS 402 (Germany)
- INRS NMP M-15 (France)

Biological monitoring (see Appendix 2 of Guideline): Measurement of 5-HNMP or 2-HMSI in urine



Points of attention for monitoring

- Description of tasks and activities to make measurement plan
- Formation of similar exposure groups (SEG)
- Personal sampling is generally preferred to static sampling
- Limit of detection/quantification of method
- Air flow and duration of measurements
- Number of measurements per SEG/task/worker
- Representativeness of measurements
- Description of conditions during measurements
- Interval for periodic reassessment
- Biological monitoring: time frame for sampling is essential