

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

#### 1.1 Product identifier

Commercial Product Name: Van Iperen Potassium Sulphate (SOP) Horticultural Grade Chemical name: Potassium Sulphate Registration number: 01-2119489441-34

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

Use of the Substance/Mixture Fertilizer Recommended restrictions on use Do not use for other purposes than the identified uses.

# 1.3. Details of the supplier of the safety data sheet

Van Iperen International BV Smidsweg 24 3273 LK Westmaas - Nederland T +31 (0) 186 578 888 - F +31 (0) 186 573 452 info@iperen.com - www.vaniperen.com

#### 1.4. Emergency telephone number

In case of emergency contact the national emergency telephone number:

UK and Ireland: 112 or 999

Country	Official advisory body	Address	Emergency number
Ireland (Republic of)	National Poisons Information Centre Beaumont Hospital	Beaumont Hospital Beaumont Road 9 Dublin	: +353 1 8379964
United Kingdom	Guy's & St Thomas' Poisons Unit Medical Toxicology Unit, Guy's & St Thomas' Hospital Trust	Avonley Road SE14 5ER London	0870 243 2241

## **SECTION 2: Hazards identification**

**2.1 Classification of the substance or mixture** Classification according to Regulation (EU) 1272/2008(CLP) Skin corrosion/irritation; Category 2; Causes skin irritation. Eye irritation; Category 2; Causes serious eye irritation.

#### 2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008) Hazard pictograms :



Signal word : Warning Hazard statements : H315 Causes skin irritation. H319 Causes serious eye irritation. Precautionary statements : Prevention: P264 Wash skin thoroughly after handling. P280 Wear protective gloves/ protective clothing/eye protection/ face protection. Response: P302 + P352 IF ON SKIN: Wash with plenty of water. P332 + P313 If skin irritation occurs: Get medical advice/attention. P362 Take off contaminated clothing and wash before reuse. P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsina. Hazardous components which must be listed on the label: • 7778-80-5 Potassium sulphate • 13778-46-6 Sulfuric acid, potassium salt (2:3)

• 7790-62-7 dipotassium disulphate

#### 2.3 Other hazards

Inhalation; Inhalation of dust may cause irritation.

Remarks; When getting wet the product causes a danger for slipping.

Remarks; This substance is not considered to be persistent, bioaccumulating and toxic (PBT). This

substance is not considered to be very persistent and very bioaccumulating (vPvB).

# **SECTION 3: Composition/information on ingredients**

3.1 Substances

Chemical nature : Potassium sulphate



Chemical name	CAS-No. FINECS-No. / FLINCS No.	Concentration [%]
Potassium sulphate	7778-80-5 231-915-5	>= 80 - <= 95
Sulfuric acid, potassium salt (2:3)	13778-46-6	>= 3 - <= 11
dipotassium disulphate	7790-62-7 232-216-8	>= 1 - < 3

### SECTION 4: First aid measures

#### 4.1 Description of first aid measures

General advice

Show this safety data sheet to the doctor in attendance. Inhalation

Move to fresh air. Rinse mouth and nose with water. Call a physician if symptoms occur.

Skin contact

Wash off with soap and water. If symptoms persist, call a physician.

Eye contact

Rinse thoroughly with plenty of water, also under the eyelids. If possible use lukewarm water. Remove contact lenses. If symptoms persist, call a physician.

Ingestion

Rinse mouth with water. Drink 1 or 2 glasses of water. Contact physician if a larger quantity of the product has been consumed.

#### 4.2 Most important symptoms and effects, both acute and delayed

Symptoms : corrosive effects

4.3 Indication of any immediate medical attention and special treatment needed

Treatment : Symptomatic treatment., Rinse with plenty of water.

## SECTION 5: Firefighting measures

## 5.1 Extinguishing media

#### Extinguishing media : Not combustible.

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

# 5.2 Special hazards arising from the substance or mixture

In case of fire hazardous decomposition products may be produced such as: sulphur dioxide, potassium oxide

#### 5.3 Advice for firefighters

Exposure to decomposition products may be a hazard to health. In the event of fire, wear self-contained breathing apparatus.

#### 5.4 Specific methods

If possible remove containers / tanks from the dangerous area. Use water spray to cool undamaged containers.

# SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For personal protection see section 8.

#### 6.2 Environmental precautions

Restrict the spread of the spillage by using inert absorbent material (sand, gravel). Cover the drains.

#### 6.3 Methods and materials for containment and cleaning up

Shovel or sweep up. Transfer into suitable containers for disposal. Must be disposed of in accordance with local and national regulations. Knock down dust with water spray jet.

# 6.4 Reference to other sections

For personal protection see section 8.

### SECTION 7: Handling and storage

#### 7.1 Precautions for safe handling

Avoid dust formation during handling. Provide adequate ventilation.

## 7.2 Conditions for safe storage, including any incompatibilities

Keep in a dry, cool place.



Materials to avoid: Strong acids and strong bases Storage stability: Storage period 36 Months

#### 7.3 Specific end use(s) Fertilizer

### **SECTION 8: Exposure controls/personal protection**

8.1 Control parameters 8.1.1 Limit values in other countries

# Lithuania:

Potassium sulphate LT OEL, 2001-12-13, IPRD = 10 mg/m<sup>3</sup> potassium chloride LT OEL, 2001-12-12, TWA = 5 mg/m<sup>3</sup> LT OEL, 2001-12-13, IPRD = 5 mg/m<sup>3</sup> Latvia: Potassium sulphate LV OEL, 2007-05-18, AER 8 st = 10 mg/m<sup>3</sup> potassium chloride LV OEL, 2004-11-01, TWA = 5 mg/m<sup>3</sup> LV OEL, 2007-05-18, AER 8 st = 5 mg/m<sup>3</sup>

DNEL

Potassium sulphate : End Use: Consumers Exposure routes: Consumer - dermal, long-term - systemic 12,8 mg/kg End Use: Consumers Exposure routes: Consumer - inhalative, long-term - systemic Value: 11,1 mg/m<sup>3</sup> End Use: Consumers Exposure routes: Consumer - oral, long-term - systemic 12,8 mg/kg

## 8.2 Exposure controls

# 8.2.1 Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice.

Ensure adequate ventilation. Eye wash bottle or emergency eye-wash fountain must be found in the work place.

8.2.2 Individual protection measures, such as personal protective equipment

Hand protection Glove material: Natural Rubber, Glove thickness: 0,5 mm

Glove material: Polychloroprene, Glove thickness: 0,5 mm

Glove material: Nitrile rubber, Glove thickness: 0,3 mm

Protective gloves complying with EN 374.Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time.Gloves should be removed and replaced immediately if there is any indication of degradation or chemical breakthrough.

Eye protection

Safety glasses with side-shields conforming to EN166 Eye wash bottle with pure water

Skin and body protection Wear protective clothing (long-sleeved, long-legged).

Respiratory protection

In case of inadequate ventilation wear respiratory protection. (filter P1)

# SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties General Information (appearance, odour) Physical state solid, powder Colour white, grey Odour mild Odour Threshold, No data available Important health safety and environmental information pH 3 Aqueous solution, (10 % solution) Melting point/range approximately 1 067 °C Boiling point/boiling range No data available Flash point Not applicable Evaporation rate Not applicable Flammability (solid, gas) : Not flammable not flammable Explosive properties: Lower explosion limit No data available



Upper explosion limit No data available Vapour pressure Not applicable Relative vapour density Not applicable Density 2,66 g/cm<sup>3</sup> Bulk density 1 200 - 1 400 kg/m<sup>3</sup> Solubility(ies): Water solubility 120 g/l ( 25 °C) Partition coefficient: n-octanol/water Not applicable, inorganic compound Auto-ignition temperature The product is not flammable. Thermal decomposition 1 089 °C Viscosity: Viscosity, dynamic Not applicable Oxidizing Not oxidizing

# 9.2 Other data

Surface tension

Surface activity is not to be expected.

# SECTION 10: Stability and reactivity

#### 10.1 Reactivity

Stable under recommended storage conditions.

#### 10.2 Chemical stability

Stable under normal conditions.

#### 10.3 Possibility of hazardous reactions

Hazardous reactions : No data available

#### 10.4 Conditions to avoid

Conditions to avoid : Protect from moisture. Keep away from heat and flames.

#### 10.5 Incompatible materials

Materials to avoid : Strong acids and strong bases

#### 10.6 Hazardous decomposition products

Hazardous decomposition products	: sulphur dioxide	
	potassium oxide	
Thermal decomposition :	1 089 °C	

# SECTION 11: Toxicological information

11.1 Information on toxicological effects Acute toxicity Based on available data, the classification criteria are not met. Potassium sulphate: LD50/Oral/Rat: 6 600 mg/kg LC50/Inhalation: LD50/Dermal/Rat/male and female: > 2 000 mg/kg Irritation and corrosion Skin: Remarks: Causes skin irritation. May dry out skin and cause irritation. Eyes: Remarks: In vitro study Causes serious eye irritation. Potassium sulphate: Skin: Remarks: Not irritating. Sensitisation Not sensitizing. Potassium sulphate: /OECD Test Guideline 429: Not sensitizing. Remarks: Similar substance: Long term toxicity Repeated dose toxicity Remarks: No evidence of systemic toxicity. Potassium sulphate: Carcinogenicity /OECD Test Guideline 453: Remarks: Information given is based on data obtained from similar substances. Not carcinogenic.

Mutagenicity OECD Test Guideline 471:



Result: negative Metabolic activation:

Reproductive toxicity /OECD Test Guideline 422: NOEL: > 1 500 mg/kg

Human experience Inhalation Symptoms: May cause irritation of respiratory tract. Skin contact Symptoms: Skin contact may provoke the following symptoms:, irritation Eye contact Symptoms: Dust from dried product may cause eye irritation. Ingestion Symptoms: In the case of large quantities product causes gastrointestinal disorders.

# **SECTION 12: Ecological information**

### 12.1 Toxicity

Aquatic toxicity Low toxicity for aquatic organisms. Potassium sulphate: LC50/96 h/Pimephales promelas (fathead minnow)/static test/US EPA TSCA Test Guidelines: 680 mg/l Remarks: fresh water LC50/48 h/Daphnia magna (Water flea)/US EPA TSCA Test Guidelines: 720 mg/l EC50/18 d/Chlorella vulgaris (Fresh water algae)/static test: 2 700 mg/l Remarks: Fresh water Toxicity to other organisms No data available

### 12.2 Persistence and degradability

Biological degradability: Potassium sulphate: Not applicable inorganic compound

#### 12.3 Bioaccumulative potential

Partition coefficient: n-octanol/water: Not applicable, inorganic compound

## 12.4.Mobility in soil

Mobility Water solubility: 120 g/l ( 25 °C) Surface tension: Surface activity is not to be expected.

## 12.5. Results of PBT and vPvB assessment

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

#### 12.6 Other adverse effects

None known. Potassium sulphate: May cause eutrophication.

## SECTION 13: Disposal considerations

#### **13.1 Waste treatment methods** Product Mu

ProductMust be disposed of in accordance with local and national regulations.Contact waste disposal services.Contaminated packagingMust be disposed of in accordance with local and national regulations.

# **SECTION 14: Transport information**

# 14.1 UN number

Land transport Not classified as dangerous in the meaning of transport regulations. Sea transport Not classified as dangerous in the meaning of transport regulations. Air transport Not classified as dangerous in the meaning of transport regulations. **14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** Not applicable

# 14.8 Special precautions for user

Causes burns., Keep away from strong acids., Keep away from strong bases.



# SECTION 15: Regulatory information

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

No restrictions identified other than those already covered in regulations. Notification status :

## 15.2 Chemical safety assessment

A Chemical Safety Assessment has been carried out for the main component

# SECTION 16: Other information

### Training advice

Read the safety data sheet before using the product.

Further information

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text. Sources of key data used to compile the Safety Data Sheet Regulations, databases, literature, own tests. Additions, Deletions, Revisions Relevant changes have been marked with vertical lines.

## **Company disclaimer**

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# Annex

# Contents: Exposure scenario 1. Manufacture

SU 3; SU8; ERC1; PROC1, PROC4, PROC8a, PROC8b, PROC9, PROC15; **2.** Industrial use of substance and formulations

SU 3; ERC2, ERC3, ERC4, ERC5, ERC6a, ERC12b; PROC1, PROC3, PROC4, PROC5, PROC6, PROC7, PROC8a, PROC8b, PROC9, PROC10, PROC13, PROC14, PROC15, PROC21, PROC24, PROC26; PC12, PC19, PC20, PC23, PC26, PC27, PC34, PC0;

3. Professional use of the substance and formulations

SU 22; ERC8a, ERC8b, ERC8c, ERC8d, ERC8e, ERC10b, ERC11b; PROC8a, PROC8b, PROC9, PROC10, PROC11, PROC13, PROC15, PROC19, PROC24, PROC26; PC12, PC21, PC27, PC35, PC0; **4. Consumer use** 

SU 21; ERC8a, ERC8b, ERC8c, ERC8d, ERC8e, ERC11b; PC12, PC27, PC0;

1. Short title of Exposure Scenario: Manufacture Main User Groups : SU 3: Industrial uses: Uses of substances as such or in preparations at industrial sites Sector of use : SU8: Manufacture of bulk, large scale chemicals (including petroleum products) Process category : PROC1: Use in closed process, no likelihood of exposure PROC4: Use in batch and other process (synthesis) where opportunity for exposure arises PROC8a: Transfer of substance or preparation (charging/ discharging) from/ to vessels/ large containers at nondedicated facilities PROC8b: Transfer of substance or preparation (charging/ discharging) from/ to vessels/ large containers at dedicated facilities PROC9: Transfer of substance or preparation into small containers (dedicated filling line, including weighing) PROC15: Use as laboratory reagent Environmental release category : ERC1: Manufacture of substances 2.1 Contributing scenario controlling environmental exposure for: ERC1 Amount used Amount used : Remarks : Not relevant Technical conditions and measures / Organizational measures Remarks : As no environmental hazard was identified no environmentalrelated exposure assessment and risk characterization was performed. 2.2 Contributing scenario controlling worker exposure for: PROC1, PROC4, PROC8a, PROC8b, PROC9, PROC15 Product characteristics Concentration of the Substance in Mixture/Article Covers the percentage of the substance in the product up to 100 % (unless stated differently). Physical Form (at time of use) : Solid substance Frequency and duration of use Exposure duration : > 4 h Other operational conditions affecting workers exposure Outdoor / Indoor : Indoor Technical conditions and measures Provide a good standard of general ventilation (not less than 3 to 5 air changes per hour), Containment as appropriate Organisational measures to prevent /limit releases, dispersion and exposure

Version: 3.0



Minimisation of manual phases., Minimise the number of staff exposed., Effective contaminant extraction Conditions and measures related to personal protection, hygiene and health evaluation Use suitable eve protection and gloves. Additional good practice advice beyond the REACH Chemical Safety Assessment Additional good practice advice : Assumes a good basic standard of occupational hygiene is implemented., Regular cleaning of equipment and work area., Management/supervision in place to check that the RMMs in place are being used correctly and OCs followed., Avoidance of contact with contaminated tools and objects. 3. Exposure estimation and reference to its source Environmental exposure assessment for this scenario is not relevant., Available hazard data do not enable the derivation of a DNEL for eye irritant effects., Qualitative approach used to conclude safe use.. Risk management measures are based on gualitative risk characterization. 4. Guidance to Downstream User to evaluate whether he works inside the boundaries set by the **Exposure Scenario** Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels. 1. Short title of Exposure Scenario: Industrial use of substance and formulations Main User Groups : SU 3: Industrial uses: Uses of substances as such or in preparations at industrial sites Product category : PC12: Fertilizers PC19: Intermediate PC20: Products such as pH-regulators, flocculants, precipitants, neutralization agents PC23: Leather tanning, dye, finishing, impregnation and care products PC26: Paper and board dye, finishing and impregnation products: including bleaches and other processing aids PC27: Plant protection products PC34: Textile dyes, finishing and impregnating products; including bleaches and other processing aids PC0: Other (use UCN codes) Process category : PROC1: Use in closed process, no likelihood of exposure PROC3: Use in closed batch process (synthesis or formulation) PROC4: Use in batch and other process (synthesis) where opportunity for exposure arises PROC5: Mixing or blending in batch processes for formulation of preparations and articles (multistage and/ or significant contact) PROC6: Calendering operations PROC7: Industrial spraying PROC8a: Transfer of substance or preparation (charging/ discharging) from/ to vessels/ large containers at nondedicated facilities PROC8b: Transfer of substance or preparation (charging/ discharging) from/ to vessels/ large containers at dedicated facilities PROC9: Transfer of substance or preparation into small containers (dedicated filling line, including weighing) PROC10: Roller application or brushing PROC13: Treatment of articles by dipping and pouring PROC14: Production of preparations or articles by tabletting, compression, extrusion, pelletisation PROC15: Use as laboratory reagent PROC21: Low energy manipulation of substances bound in materials and/ or articles PROC24: High (mechanical) energy work-up of substances bound in materials and/ or articles PROC26: Handling of solid inorganic substances at ambient Temperature



Environmental release category : ERC2: Formulation of preparations ERC3: Formulation in materials ERC4: Industrial use of processing aids in processes and products, not becoming part of articles ERC5: Industrial use resulting in inclusion into or onto a matrix ERC6a: Industrial use resulting in manufacture of another substance (use of intermediates) ERC12b: Industrial processing of articles with abrasive techniques (high release) 2.1 Contributing scenario controlling environmental exposure for: ERC2, ERC3, ERC4, ERC5, ERC6a, ERC12b Amount used Amount used : Remarks : Not relevant Technical conditions and measures / Organizational measures Remarks : As no environmental hazard was identified no environmentalrelated exposure assessment and risk characterization was performed. 2.2 Contributing scenario controlling worker exposure for: PROC1, PROC3, PROC4, PROC5. PROC6, PROC7, PROC8a, PROC8b, PROC9, PROC10, PROC13, PROC14, PROC15, PROC21, PROC24, PROC26 Product characteristics Concentration of the Substance in Mixture/Article Covers the percentage of the substance in the product up to 100 % (unless stated differently). Physical Form (at time of use) : Solid substance Frequency and duration of use Exposure duration : > 4 h Other operational conditions affecting workers exposure Outdoor / Indoor : Indoor Technical conditions and measures Provide a good standard of general ventilation (not less than 3 to 5 air changes per hour), Containment as appropriate Organisational measures to prevent /limit releases, dispersion and exposure Minimisation of manual phases., Minimise the number of staff exposed., Effective contaminant extraction Conditions and measures related to personal protection, hygiene and health evaluation Use suitable eye protection and gloves. Additional good practice advice beyond the REACH Chemical Safety Assessment Additional good practice advice : Assumes a good basic standard of occupational hygiene is implemented., Regular cleaning of equipment and work area., Management/supervision in place to check that the RMMs in place are being used correctly and OCs followed., Avoidance of contact with contaminated tools and objects. 3. Exposure estimation and reference to its source Environmental exposure assessment for this scenario is not relevant., Available hazard data do not enable the derivation of a DNEL for eye irritant effects., Qualitative approach used to conclude safe use., Risk management measures are based on qualitative risk characterization. 4. Guidance to Downstream User to evaluate whether he works inside the boundaries set by the **Exposure Scenario** Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.

<sup>1.</sup> Short title of Exposure Scenario: Professional use of the substance and formulations Main User Groups : SU 22: Professional uses: Public domain (administration,



education, entertainment, services, craftsmen) Product category : PC12: Fertilizers PC21: Laboratory chemicals PC27: Plant protection products PC35: Washing and cleaning products (including solvent based products) PC0: Other (use UCN codes) Process category : PROC8a: Transfer of substance or preparation (charging/ discharging) from/ to vessels/ large containers at nondedicated facilities PROC8b: Transfer of substance or preparation (charging/ discharging) from/ to vessels/ large containers at dedicated facilities PROC9: Transfer of substance or preparation into small containers (dedicated filling line, including weighing) PROC10: Roller application or brushing PROC11: Non industrial spraying PROC13: Treatment of articles by dipping and pouring PROC15: Use as laboratory reagent PROC19: Hand-mixing with intimate contact and only PPE available PROC24: High (mechanical) energy work-up of substances bound in materials and/ or articles PROC26: Handling of solid inorganic substances at ambient temperature Environmental release category : ERC8a: Wide dispersive indoor use of processing aids in open systems ERC8b: Wide dispersive indoor use of reactive substances in open systems ERC8c: Wide dispersive indoor use resulting in inclusion into or onto a matrix ERC8d: Wide dispersive outdoor use of processing aids in open systems ERC8e: Wide dispersive outdoor use of reactive substances in open systems ERC10b: Wide dispersive outdoor use of long-life articles and materials with high or intended release (including abrasive processing) ERC11b: Wide dispersive indoor use of long-life articles and materials with high or intended release (including abrasive processing) 2.1 Contributing scenario controlling environmental exposure for: ERC8a, ERC8b, ERC8c, ERC8d, ERC8e, ERC10b, ERC11b Amount used Amount used : Remarks : Not relevant Technical conditions and measures / Organizational measures Remarks : As no environmental hazard was identified no environmentalrelated exposure assessment and risk characterization was performed. 2.2 Contributing scenario controlling worker exposure for: PROC8a, PROC8b, PROC9, PROC10, PROC11, PROC13, PROC15, PROC19, PROC24, PROC26 **Product characteristics** Concentration of the Substance in Mixture/Article Covers the percentage of the substance in the product up to 100 % (unless stated differently). Physical Form (at time of use) : Aqueous solution, Solid mixture Frequency and duration of use Exposure duration : > 4 h Other operational conditions affecting workers exposure Outdoor / Indoor : Indoor and outdoor Technical conditions and measures



Provide a good standard of general ventilation (not less than 3 to 5 air changes per hour), Containment as appropriate Organisational measures to prevent /limit releases, dispersion and exposure Minimisation of manual phases., Minimise the number of staff exposed., Effective contaminant extraction Conditions and measures related to personal protection, hygiene and health evaluation Use suitable eye protection and gloves. Additional good practice advice beyond the REACH Chemical Safety Assessment Additional good practice advice : Assumes a good basic standard of occupational hygiene is implemented., Regular cleaning of equipment and work area., Management/supervision in place to check that the RMMs in place are being used correctly and OCs followed., Avoidance of contact with contaminated tools and objects. 3. Exposure estimation and reference to its source Environmental exposure assessment for this scenario is not relevant., Available hazard data do not enable the derivation of a DNEL for eye irritant effects., Qualitative approach used to conclude safe use., Risk management measures are based on qualitative risk characterization. 4. Guidance to Downstream User to evaluate whether he works inside the boundaries set by the **Exposure Scenario** Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels. 1. Short title of Exposure Scenario: Consumer use Main User Groups : SU 21: Consumer uses: Private households (= general public = consumers) Product category : PC12: Fertilizers PC27: Plant protection products PC0: Other (use UCN codes) Environmental release category : ERC8a: Wide dispersive indoor use of processing aids in open systems ERC8b: Wide dispersive indoor use of reactive substances in open systems ERC8c: Wide dispersive indoor use resulting in inclusion into or onto a matrix ERC8d: Wide dispersive outdoor use of processing aids in open systems ERC8e: Wide dispersive outdoor use of reactive substances in open systems ERC11b: Wide dispersive indoor use of long-life articles and materials with high or intended release (including abrasive processing) 2.1 Contributing scenario controlling environmental exposure for: ERC8a, ERC8b, ERC8c, ERC8d, ERC8e, ERC11b Amount used Amount used : Remarks : Not relevant 2.2Contributing scenario controlling consumer exposure for: PC0, PC12, PC27 Product characteristics Concentration of the Substance in Mixture/Article Covers the percentage of the substance in the product up to 100 % (unless stated differently). Physical Form (at time of use) : Aqueous solution, Solid mixture Conditions and measures related to protection of consumer (e.g. behavioural advice, personal protection and hygiene) Consumer Measures : The use of safety glasses is recommended. 3. Exposure estimation and reference to its source Environmental exposure assessment for this scenario is not relevant., Available hazard data do not enable the derivation of a DNEL for eye irritant effects., Qualitative approach used to conclude safe use., Risk management measures are based on gualitative risk characterization. 4. Guidance to Downstream User to evaluate whether he works inside the boundaries set by the **Exposure Scenario** Where other Risk Management Measures/Operational Conditions are adopted, then users should



ensure that risks are managed to at least equivalent levels.