FICHA DE DATOS DE SEGURIDAD
(de acuerdo con el Reglamento (UE) 2020/878)

0055-Filnet

SECCIÓN 1: IDENTIFICACIÓN DE LA SUSTANCIA O LA MEZCLA Y DE LA SOCIEDAD O LA EMPRESA.

1.1 Identificador de producto.

Nombre del producto:	Filnet
Código del producto:	0055
Nombre químico:	ácido sulfámico
N. Indice:	016-026-00-0
N. CAS:	5329-14-6
N. CE:	226-218-8
N. registro:	01-2119488633-28-XXXX

1.2 Usos pertinentes identificados de la sustancia o de la mezcla y usos desaconsejados.

Descalcificador en polvo para filtros

Usos desaconsejados:
Usos distintos a los aconsejados.
Los escenarios de exposición que cubren los usos se pueden encontrar en el Anexo.

1.3 Datos del proveedor de la ficha de datos de seguridad.

Empresa:	**FLUIDRA COMMERCIAL, S.A.U.**
Dirección:	Av. Alcalde Barnils, 69
Población:	08174 Sant Cugat del Vallès (Barcelona) Spain
Provincia:	Barcelona
Teléfono:	Tel:34 93 724 39 00 Fax:34 93 724 29 93
Fax:	+34 93 713 41 11
E-mail:	fds@inquide.com
Web:	www.astralpool.com

1.4 Teléfono de emergencia: +34 93 724 39 00 (Sólo disponible en horario de oficina; Lunes-Viernes; 08:00-18:00)
Servicio de Información Toxicológica (Instituto Nacional de Toxicología y Ciencias Forenses) Teléfono: +34 91 5620420.
Información en español (24h/365 días). Únicamente con la finalidad de proporcionar respuesta sanitaria en caso de urgencia.

SECCIÓN 2: IDENTIFICACIÓN DE LOS PELIGROS.

2.1 Clasificación de la sustancia o de la mezcla.
Según el Reglamento (EU) No 1272/2008:
Aquatic Chronic 3 : Nocivo para los organismos acuáticos, con efectos nocivos duraderos.
Eye Irrit. 2 : Provoca irritación ocular grave.
Skin Irrit. 2 : Provoca irritación cutánea.

2.2 Elementos de la etiqueta.
Etiquetado conforme al Reglamento (EU) No 1272/2008:
Pictogramas:

Palabra de advertencia:
Atención
Indicaciones de peligro:

H315	Provoca irritación cutánea.
H319	Provoca irritación ocular grave.
H412	Nocivo para los organismos acuáticos, con efectos nocivos duraderos.

Consejos de prudencia:

P102	Mantener fuera del alcance de los niños.

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P273 Evitar su liberación al medio ambiente.
P302+P352 EN CASO DE CONTACTO CON LA PIEL: Lavar con abundante agua y jabón abundante.
P305+P351+P338 EN CASO DE CONTACTO CON LOS OJOS: Enjuagar con agua cuidadosamente durante varios minutos. Quitar las lentes de contacto cuando estén presentes y pueda hacerse con facilidad. Proseguir con el lavado.
P332+P313 En caso de irritación cutánea: Consultar a un médico.
P337+P313 Si persiste la irritación ocular: Consultar a un médico.
P362+P364 Quitar las prendas contaminadas y lavarlas antes de volver a usarlas.
P501 Elimínese el contenido y/o su recipiente de acuerdo con la normativa sobre residuos peligrosos.

Contiene:
ácido sulfámico

2.3 Otros peligros.

La sustancia no es PBT
La sustancia no es mPmB
La sustancia no tiene propiedades de alteración endocrina.

En condiciones de uso normal y en su forma original, el producto no tiene ningún otro efecto negativo para la salud y el medio ambiente.

SECCIÓN 3: COMPOSICIÓN/INFORMACIÓN SOBRE LOS COMPONENTES.

3.1 Sustancias.

Identificadores	Nombre	Concentración	(*)Clasificación - Reglamento 1272/2008	
			Clasificación	Límites de concentración específicos y Estimación de Toxicidad Aguda
N. Indice: 016-026-00-0 N. CAS: 5329-14-6 N. CE: 226-218-8	ácido sulfámico	25 - 100 %	Aquatic Chronic 3, H412 - Eye Irrit. 2, H319 - Skin Irrit. 2, H315	-

3.2 Mezclas.
No Aplicable.

SECCIÓN 4: PRIMEROS AUXILIOS.

MEZCLA IRRITANTE. Su contacto repetido o prolongado con la piel o las mucosas, puede causar síntomas irritantes, tales como enrojecimiento, ampollas o dermatitis. Algunos de los síntomas pueden no ser inmediatos. Pueden producirse reacciones alérgicas en la piel.
La información de la composición actualizada del producto ha sido remitida al Servicio de información Toxicológica (Instituto Nacional de Toxicología y Ciencias Forenses). En caso de intoxicación llamar al Servicio de Información Toxicológica:
Tfno (24 horas) 91 562 04 20

4.1 Descripción de los primeros auxilios.
En los casos de duda, o cuando persistan los síntomas de malestar, solicitar atención médica. No administrar nunca nada por vía oral a personas que se encuentren inconscientes.

Inhalación.
Situar al accidentado al aire libre, mantenerle caliente y en reposo, si la respiración es irregular o se detiene, practicar respiración artificial.

Contacto con los ojos.
Retirar las lentes de contacto, si lleva y resulta fácil de hacer. Lavar abundantemente los ojos con agua limpia y fresca durante, por lo menos, 10 minutos, tirando hacia arriba de los párpados y buscar asistencia médica. No permita que la persona se frote el ojo afectado.

Contacto con la piel.
Quitar la ropa contaminada. Lavar la piel vigorosamente con agua y jabón o un limpiador de piel adecuado. NUNCA utilizar disolventes o diluyentes.

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Ingestión.
Si accidentalmente se ha ingerido, buscar inmediatamente atención médica. Mantenerle en reposo. NUNCA provocar el vómito.

4.2 Principales síntomas y efectos, agudos y retardados.
Producto Irritante, el contacto repetido o prolongado con la piel o las mucosas puede causar enrojecimiento, ampollas o dermatitis, la inhalación de niebla de pulverización o partículas en suspensión puede causar irritación de las vias respiratorias, algunos de los síntomas pueden no ser inmediatos.

4.3 Indicación de toda atención médica y de los tratamientos especiales que deban dispensarse inmediatamente.
En los casos de duda, o cuando persistan los síntomas de malestar, solicitar atención médica. No administrar nunca nada por vía oral a personas que se encuentren inconscientes. Cubra la zona afectada con un apósito estéril seco. Proteja la zona afectada de presión o fricción.

SECCIÓN 5: MEDIDAS DE LUCHA CONTRA INCENDIOS.

El producto NO está clasificado como inflamable, en caso de incendio se deben seguir las medidas expuestas a continuación:

5.1 Medios de extinción.
Medios de extinción apropiados:
Polvo extintor o CO2. En caso de incendios más graves también espuma resistente al alcohol y agua pulverizada.

Medios de extinción no apropiados:
No usar para la extinción chorro directo de agua. En presencia de tensión eléctrica no es aceptable utilizar agua o espuma como medio de extinción.

5.2 Peligros específicos derivados de la sustancia o la mezcla.
Riesgos especiales.
La exposición a los productos de combustión o descomposición puede ser perjudicial para la salud.

5.3 Recomendaciones para el personal de lucha contra incendios.
Refrigerar con agua los tanques, cisternas o recipientes próximos a la fuente de calor o fuego. Tener en cuenta la dirección del viento. Evitar que los productos utilizados en la lucha contra incendio pasen a desagües, alcantarillas o cursos de agua. Los restos de producto y medios de extinción pueden contaminar el medio ambiente acuático.

Equipo de protección contra incendios.
Según la magnitud del incendio, puede ser necesario el uso de trajes de protección contra el calor, equipo respiratorio autónomo, guantes, gafas protectoras o máscaras faciales y botas.

SECCIÓN 6: MEDIDAS EN CASO DE VERTIDO ACCIDENTAL.

6.1 Precauciones personales, equipo de protección y procedimientos de emergencia.
Para control de exposición y medidas de protección individual, ver sección 8.

6.2 Precauciones relativas al medio ambiente.
Producto peligroso para el medio ambiente, en caso de producirse grandes vertidos o si el producto contamina lagos, ríos o alcantarillas, informar a las autoridades competentes, según la legislación local. Evitar la contaminación de desagües, aguas superficiales o subterráneas, así como del suelo.

6.3 Métodos y material de contención y de limpieza.
Contener y recoger el vertido con material absorbente inerte (tierra, arena, vermiculita, tierra de diatomeas...) y limpiar la zona inmediatamente con un descontaminante adecuado.
Depositar los residuos en envases cerrados y adecuados para su eliminación, de conformidad con las normativas locales y nacionales (ver sección 13).

6.4 Referencia a otras secciones.
Para control de exposición y medidas de protección individual, ver sección 8.
Para la eliminación de los residuos, seguir las recomendaciones de la sección 13.

SECCIÓN 7: MANIPULACIÓN Y ALMACENAMIENTO.

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7.1 Precauciones para una manipulación segura.
Para la protección personal, ver sección 8.
En la zona de aplicación debe estar prohibido fumar, comer y beber.
Cumplir con la legislación sobre seguridad e higiene en el trabajo.
No emplear nunca presión para vaciar los envases, no son recipientes resistentes a la presión. Conservar el producto en envases de un material idéntico al original.

7.2 Condiciones de almacenamiento seguro, incluidas posibles incompatibilidades.
Almacenar según la legislación local. Observar las indicaciones de la etiqueta. Almacenar los envases entre 5 y 25 ºC, en un lugar seco y bien ventilado, lejos de fuentes de calor y de la luz solar directa. Mantener lejos de puntos de ignición. Mantener lejos de agentes oxidantes y de materiales fuertemente ácidos o alcalinos. No fumar. Evitar la entrada a personas no autorizadas. Una vez abiertos los envases, han de volverse a cerrar cuidadosamente y colocarlos verticalmente para evitar derrames.

El producto no se encuentra afectado por la Directiva 2012/18/UE (SEVESO III).

7.3 Usos específicos finales.
Ningún uso particular.

SECCIÓN 8: CONTROLES DE EXPOSICIÓN/PROTECCIÓN INDIVIDUAL.

8.1 Parámetros de control.

El producto NO contiene sustancias con Valores Límite Ambientales de Exposición Profesional.El producto NO contiene sustancias con Valores Límite Biológicos.
Niveles de concentración DNEL/DMEL:

Nombre	DNEL/DMEL	Tipo	Valor
ácido sulfámico N. CAS: 5329-14-6 N. CE: 226-218-8	DNEL (Trabajadores)	Cutánea, Crónico, Efectos sistémicos	10 (mg/kg bw/day)
	DNEL (Consumidores)	Cutánea, Crónico, Efectos sistémicos	5 (mg/kg bw/day)
	DNEL (Consumidores)	Oral, Crónico, Efectos sistémicos	5 (mg/kg bw/day)

DNEL: Derived No Effect Level, (nivel sin efecto obtenido) nivel de exposición a la sustancia por debajo del cual no se prevén efectos adversos.
DMEL: Derived Minimal Effect Level, nivel de exposición que corresponde a un riesgo bajo, que debe considerarse un riesgo mínimo tolerable.

Niveles de concentración PNEC:

Nombre	Detalles	Valor
ácido sulfámico N. CAS: 5329-14-6 N. CE: 226-218-8	agua (agua dulce)	0,048 (mg/L)
	agua (agua marina)	0,0048 (mg/L)
	agua (liberaciones intermitentes)	0,48 (mg/L)
	Planta de tratamiento de aguas residuales	2 (mg/L)
	sedimento (agua dulce)	0,173 (mg/kg sediment dw)
	sedimento (agua marina)	0,0173 (mg/kg sediment dw)
	suelo	0,00638 (mg/kg soil dw)

PNEC: Predicted No Effect Concentration, (concentración prevista sin efecto) concentración de la sustancia por debajo de la cual no se esperan efectos negativos en el comportamiento medioambiental.

8.2 Controles de la exposición.

Medidas de orden técnico:

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Proveer una ventilación adecuada, lo cual puede conseguirse mediante una buena extracción-ventilación local y un buen sistema general de extracción.

Concentración:	**100 %**			
Usos:	**Descalcificador en polvo para filtros**			
Protección respiratoria:				
Si se cumplen las medidas técnicas recomendadas no es necesario ningún equipo de protección individual.				
Protección de las manos:				
EPI:	Guantes de protección contra productos químicos			
Características:	Marcado «CE» Categoría III.			
Normas CEN:	EN 374-1, En 374-2, EN 374-3, EN 420			
Mantenimiento:	Se guardarán en un lugar seco, alejados de posibles fuentes de calor, y se evitará la exposición a los rayos solares en la medida de lo posible. No se realizarán sobre los guantes modificaciones que puedan alterar su resistencia ni se aplicarán pinturas, disolventes o adhesivos.			
Observaciones:	Los guantes deben ser de la talla correcta, y ajustarse a la mano sin quedar demasiado holgados ni demasiado apretados. Se deberán utilizar siempre con las manos limpias y secas.			
Material:	PVC (Cloruro de polivinilo)	Tiempo de penetración (min.):	> 480	Espesor del material (mm): 0,35
Protección de los ojos:				
EPI:	Pantalla facial			
Características:	Marcado «CE» Categoría II. Protector de ojos y cara contra salpicaduras de líquidos.			
Normas CEN:	EN 165, EN 166, EN 167, EN 168			
Mantenimiento:	La visibilidad a través de los oculares debe ser óptima para lo cual estos elementos se deben limpiar a diario, los protectores deben desinfectarse periódicamente siguiendo las instrucciones del fabricante. Se vigilará que las partes móviles tengan un accionamiento suave.			
Observaciones:	Las pantallas faciales deben tener un campo de visión con una dimensión en la línea central de 150 mm como mínimo, en sentido vertical una vez acopladas en el armazón.			
Protección de la piel:				
EPI:	Ropa de protección			
Características:	Marcado «CE» Categoría II. La ropa de protección no debe ser estrecha o estar suelta para que no interfiera en los movimientos del usuario.			
Normas CEN:	EN 340			
Mantenimiento:	Se deben seguir las instrucciones de lavado y conservación proporcionadas por el fabricante para garantiza una protección invariable.			
Observaciones:	La ropa de protección debería proporcionar un nivel de confort consistente con el nivel de protección que debe proporcionar contra el riesgo contra el que protege, con las condiciones ambientales, el nivel de actividad del usuario y el tiempo de uso previsto.			

SECCIÓN 9: PROPIEDADES FÍSICAS Y QUÍMICAS.

9.1 Información sobre propiedades físicas y químicas básicas.
Estado físico: Sólido
Color: Blanco
Olor: Inodoro
Umbral olfativo: No aplicable/No disponible debido a la naturaleza/las propiedades del producto.
Punto de fusión: 205 ºC
Punto de congelación: No aplicable/No disponible debido a la naturaleza/las propiedades del producto.
Punto/Punto inicial/intervalo de ebullición: No aplicable/No disponible debido a la naturaleza/las propiedades del producto.
Inflamabilidad: No aplicable/No disponible debido a la naturaleza/las propiedades del producto.
Límite inferior de explosión: No aplicable/No disponible debido a la naturaleza/las propiedades del producto.
Límite superior de explosión: No aplicable/No disponible debido a la naturaleza/las propiedades del producto.
Punto de inflamación: 100 ºC (Estimación en base a las indicaciones del Reglamento (CE) Nº1272/2008)
Temperatura de auto-inflamación: No aplicable/No disponible debido a la naturaleza/las propiedades del producto.
Temperatura de descomposición: No aplicable/No disponible debido a la naturaleza/las propiedades del producto.
pH: 1,18 (1%)
Viscosidad cinemática: No aplicable/No disponible debido a la naturaleza/las propiedades del producto.
Solubilidad: No aplicable/No disponible debido a la naturaleza/las propiedades del producto.
Hidrosolubilidad: 213 g/l
Liposolubilidad: No aplicable/No disponible debido a la naturaleza/las propiedades del producto.
Coeficiente de reparto (n-octanol/agua)(valor logaritmico): No aplicable/No disponible debido a la naturaleza/las propiedades del producto.

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Presión de vapor: No aplicable/No disponible debido a la naturaleza/las propiedades del producto.
Densidad absoluta: No aplicable/No disponible debido a la naturaleza/las propiedades del producto.
Densidad relativa: 2.12 (20 ºC)
Densidad de vapor: No aplicable/No disponible debido a la naturaleza/las propiedades del producto.
Características de las partículas: No aplicable/No disponible debido a la naturaleza/las propiedades del producto.

9.2 Otros datos.
Viscosidad: No aplicable/No disponible debido a la naturaleza/las propiedades del producto.
Propiedades explosivas: No aplicable/No disponible debido a la naturaleza/las propiedades del producto.
Propiedades comburentes: No aplicable
Punto de gota: No aplicable/No disponible debido a la naturaleza/las propiedades del producto.
Centelleo: No aplicable/No disponible debido a la naturaleza/las propiedades del producto.
% Sólidos: No aplicable/No disponible debido a la naturaleza/las propiedades del producto.

SECCIÓN 10: ESTABILIDAD Y REACTIVIDAD.

10.1 Reactividad.
El producto no presenta peligros debido a su reactividad.

10.2 Estabilidad química.
Inestable en contacto con:
- Bases.

10.3 Posibilidad de reacciones peligrosas.
Puede producirse una neutralización en contacto con bases.

10.4 Condiciones que deben evitarse.
- Evitar el contacto con bases.

10.5 Materiales incompatibles.
Evitar los siguientes materiales:
- Bases.

10.6 Productos de descomposición peligrosos.
Dependiendo de las condiciones de uso, pueden generarse los siguientes productos:
- Vapores o gases corrosivos.

SECCIÓN 11: INFORMACIÓN TOXICOLÓGICA.

MEZCLA IRRITANTE. Salpicaduras en los ojos pueden causar irritación de los mismos.
MEZCLA IRRITANTE. Su contacto repetido o prolongado con la piel o las mucosas, puede causar síntomas irritantes, tales como enrojecimiento, ampollas o dermatitis. Algunos de los síntomas pueden no ser inmediatos. Pueden producirse reacciones alérgicas en la piel.
11.1 Información sobre las clases de peligro definidas en el Reglamento (CE) nº 1272/2008.
El contacto repetido o prolongado con el producto, puede causar la eliminación de la grasa de la piel, dando lugar a una dermatitis de contacto no alérgica y a que se absorba el producto a través de la piel.

Información Toxicológica.

Nombre	Toxicidad aguda			
	Tipo	Ensayo	Especie	Valor
ácido sulfámico N. CAS: 5329-14-6 N. CE: 226-218-8	Oral	L50	Rata	> 2000 mg/kg
	Cutánea	LD50 [1] Study report, 2010.	Rata	>2000 mg/kg bw [1]
	Inhalación			

a) toxicidad aguda;
Datos no concluyentes para la clasificación.

b) corrosión o irritación cutáneas;
Producto clasificado:

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Irritante cutáneo, Categoría 2: Provoca irritación cutánea.

c) lesiones oculares graves o irritación ocular;
Producto clasificado:
Irritación ocular, Categoría 2: Provoca irritación ocular grave.

d) sensibilización respiratoria o cutánea;
Datos no concluyentes para la clasificación.

e) mutagenicidad en células germinales;
Datos no concluyentes para la clasificación.

f) carcinogenicidad;
Datos no concluyentes para la clasificación.

g) toxicidad para la reproducción;
Datos no concluyentes para la clasificación.

h) toxicidad específica en determinados órganos (STOT) - exposición única;
Datos no concluyentes para la clasificación.

i) toxicidad específica en determinados órganos (STOT) - exposición repetida;
Datos no concluyentes para la clasificación.

j) peligro por aspiración;
Datos no concluyentes para la clasificación.

11.2 Información relativa a otros peligros.

Propiedades de alteración endocrina.
Este producto no contiene componentes con propiedades de alteración endocrina con efectos sobre la salud humana.
Otros datos.
No existe información disponible sobre otros efectos adversos para la salud.

SECCIÓN 12: INFORMACIÓN ECOLÓGICA.

12.1 Toxicidad.

Nombre	Ecotoxicidad			
	Tipo	Ensayo	Especie	Valor
ácido sulfámico N. CAS: 5329-14-6 N. CE: 226-218-8	Peces	LC50	Pimephales promelas	70.3 mg/l (96 h) [1] [1] Aquatic Toxicity of Forty Industrial Chemicals: Testing in Support of Hazardous Substance Spill Prevention Regulation, M.W. CURTIS and C.H. WARD, 1981.
	Invertebrados acuáticos	EC50	Dafnia magna	71.6 mg/l (48 h) [1] [1] Study report, 2010.
	Plantas acuáticas	EC50	Desmodesmus subspicatus	48 mg/l (72 h) [1] [1] Study report, 2010. OECD Guideline 201 (Alga, Growth Inhibition Test)

12.2 Persistencia y degradabilidad.
No se dispone de información relativa a la biodegradabilidad.
No se dispone de información relativa a la degradabilidad.
No existe información disponible sobre la persistencia y degradabilidad del producto.

12.3 Potencial de bioacumulación.
No se dispone de información relativa a la Bioacumulación.

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12.4 Movilidad en el suelo.
No existe información disponible sobre la movilidad en el suelo.
No se debe permitir que el producto pase a las alcantarillas o a cursos de agua.
Evitar la penetración en el terreno.

12.5 Resultados de la valoración PBT y mPmB.
No existe información disponible sobre la valoración PBT y mPmB del producto.

12.6 Propiedades de alteración endocrina.
Este producto no contiene componentes con propiedades de alteración endocrina sobre el medio ambiente.

12.7 Otros efectos adversos.
No existe información disponible sobre otros efectos adversos para el medio ambiente.

SECCIÓN 13: CONSIDERACIONES RELATIVAS A LA ELIMINACIÓN.

13.1 Métodos para el tratamiento de residuos.
No se permite su vertido en alcantarillas o cursos de agua. Los residuos y envases vacíos deben manipularse y eliminarse de acuerdo con las legislaciones local/nacional vigentes.
Seguir las disposiciones de la Directiva 2008/98/CE respecto a la gestión de residuos.

SECCIÓN 14: INFORMACIÓN RELATIVA AL TRANSPORTE.

Transportar siguiendo las normas ADR/TPC para el transporte por carretera, las RID por ferrocarril, las IMDG por mar y las ICAO/IATA para transporte aéreo.
Tierra: Transporte por carretera: ADR, Transporte por ferrocarril: RID.
Documentación de transporte: Carta de porte e Instrucciones escritas.
Mar: Transporte por barco: IMDG.
Documentación de transporte: Conocimiento de embarque.
Aire: Transporte en avión: IATA/ICAO.
Documento de transporte: Conocimiento aéreo.

14.1 Número ONU o número ID.
Nº UN: UN2967

14.2 Designación oficial de transporte de las Naciones Unidas.
Descripción:
ADR/RID: UN 2967, ÁCIDO SULFÁMICO, 8, GE III, (E)
IMDG: UN 2967, ÁCIDO SULFÁMICO, 8, GE/E III
ICAO/IATA: UN 2967, ÁCIDO SULFÁMICO, 8, GE III

14.3 Clase(s) de peligro para el transporte.
Clase(s): 8

14.4 Grupo de embalaje.
Grupo de embalaje: III

14.5 Peligros para el medio ambiente.
Contaminante marino: No
Transporte por barco, FEm - Fichas de emergencia (F – Incendio, S – Derrames): F-A,S-B

14.6 Precauciones particulares para los usuarios.
Etiquetas: 8

Número de peligro: 80

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ADR cantidad limitada: 5 kg
IMDG cantidad limitada: 5 kg
ICAO cantidad limitada: 5 kg

Disposiciones relativas al transporte a granel en ADR:
VC1 Está autorizado el transporte a granel en vehículos entoldados, en contenedores entoldados o en contenedores para granel entoldados.
VC2 Está autorizado el transporte a granel en vehículos cubiertos, en contenedores cerrados o en contenedores para granel cerrados.
AP7 El transporte a granel no debe ser efectuado nada más que en cargamento completo.
Actuar según el punto 6.
Grupo de segregación del Código IMDG: 1 Ácidos

14.7 Transporte marítimo a granel con arreglo a los instrumentos de la OMI.
El producto no está afectado por el transporte a granel en buques.

SECCIÓN 15: INFORMACIÓN REGLAMENTARIA.

15.1 Reglamentación y legislación en materia de seguridad, salud y medio ambiente específicas para la sustancia o la mezcla.
El producto no está afectado por el Reglamento (CE) nº 1005/2009 del Parlamento Europeo y del Consejo, de 16 de septiembre de 2009, sobre las sustancias que agotan la capa de ozono.

Compuesto orgánico volátil (COV)
Contenido de COV (p/p): 0 %
Contenido de COV: 0 g/l

Clasificación del producto de acuerdo con el Anexo I de la Directiva 2012/18/UE (SEVESO III): N/A

El producto no está afectado por el Reglamento (UE) No 528/2012 relativo a la comercialización y el uso de los biocidas.
El producto no se encuentra afectado por el procedimiento establecido en el Reglamento (UE) No 649/2012, relativo a la exportación e importación de productos químicos peligrosos.

Clase de contaminante para el agua (Alemania): WGK 1: Poco peligroso para el agua. (Autoclasificado según Reglamento AwSV)

15.2 Evaluación de la seguridad química.
No se ha llevado a cabo una evaluación de la seguridad química del producto.
Se dispone de Escenario de Exposición del producto.

SECCIÓN 16: OTRA INFORMACIÓN.

Códigos de clasificación:

Aquatic Chronic 3 : Efectos crónicos para el medio ambiente acuático, Categoría 3
Eye Irrit. 2 : Irritación ocular, Categoría 2
Skin Irrit. 2 : Irritante cutáneo, Categoría 2

Modificaciones respecto a la versión anterior:

- Modificación de peligros específicos (SECCIÓN 2.3).
- Modificación en las medidas de lucha contra incendios (SECCIÓN 5.2).
- Modificaciones en las medidas en caso de vertido accidental (SECCIÓN 6.1).
- Modificaciones en las medidas en caso de vertido accidental (SECCIÓN 6.2).
- Modificación en los valores de las propiedades físico-químicas (SECCIÓN 9).
- Cambio en la clasificación de peligrosidad (SECCIÓN 11.1).
- Modificación de la clasificación ADR/IMDG/ICAO/IATA/RID (SECCIÓN 14).
- Cambios legislativos nacionales (SECCIÓN 15.1).
- Añadidas abreviaturas y acrónimos (SECCIÓN 16).

-Continúa en la página siguiente.-

Clasificación y procedimiento utilizado para determinar la clasificación de las mezclas con arreglo al Reglamento (CE) nº 1272/2008 [CLP]:

Peligros físicos	Conforme a datos obtenidos de los ensayos
Peligros para la salud	Método de cálculo
Peligros para el medio ambiente	Método de cálculo

Se aconseja realizar formación básica con respecto a seguridad e higiene laboral para realizar una correcta manipulación del producto.

Se dispone de Escenario de Exposición del producto.

Abreviaturas y acrónimos utilizados:
ADR/RID: Acuerdo europeo sobre el transporte internacional de mercancías peligrosas por carretera.
AwSV: Reglamento de Instalaciones para la manipulación de sustancias peligrosas para el agua.
CEN: Comité Europeo de Normalización.
DMEL: Derived Minimal Effect Level, nivel de exposición que corresponde a un riesgo bajo, que debe considerarse un riesgo mínimo tolerable.
DNEL: Derived No Effect Level, (nivel sin efecto obtenido) nivel de exposición a la sustancia por debajo del cual no se prevén efectos adversos.
EC50: Concentración efectiva media.
EPI: Equipo de protección personal.
IATA: Asociación Internacional de Transporte Aéreo.
ICAO: Organización de Aviación Civil Internacional.
IMDG: Código Marítimo Internacional de Mercancías Peligrosas.
LC50: Concentración Letal, 50%.
LD50: Dosis Letal, 50%.
PNEC: Predicted No Effect Concentration, (concentración prevista sin efecto) concentración de la sustancia por debajo de la cual no se esperan efectos negativos en el comportamiento medioambiental.
RID: Regulación concerniente al transporte internacional de mercancías peligrosas por ferrocarril.
WGK: Clases de peligros para el agua.

Principales referencias bibliográficas y fuentes de datos:
http://eur-lex.europa.eu/homepage.html
http://echa.europa.eu/
Reglamento (UE) 2020/878.
Reglamento (CE) No 1907/2006.
Reglamento (EU) No 1272/2008.

La información facilitada en esta ficha de Datos de Seguridad ha sido redactada de acuerdo con el REGLAMENTO (UE) 2020/878 DE LA COMISIÓN de 18 de junio de 2020 por el que se modifica el anexo II del Reglamento (CE) n.o 1907/2006 del Parlamento Europeo y del Consejo, relativo al registro, la evaluación, la autorización y la restricción de las sustancias y mezclas químicas (REACH).

La información de esta Ficha de Datos de Seguridad del Producto está basada en los conocimientos actuales y en las leyes vigentes de la CE y nacionales, en cuanto que las condiciones de trabajo de los usuarios están fuera de nuestro conocimiento y control. El producto no debe utilizarse para fines distintos a aquellos que se especifican, sin tener primero una instrucción por escrito, de su manejo. Es siempre responsabilidad del usuario tomar las medidas oportunas con el fin de cumplir con las exigencias establecidas en las legislaciones.

-Fin de la ficha de datos de seguridad.-

The following exposure scenarios have been assessed for the product mentioned above:

1. Exposure scenario title	**ES 1: Manufacturing of cleaning and maintenance products, surface treatment products and/or biocidal products**
2. Identified uses covered in the Exposure Scenario	
(ES 1 just covers the manufacture or formulation of these end products) Identified Use 1 “Kitchen cleaner, dishwash product” Identified Use 2 “Floor and sanitary cleaner” Identified Use 4 “Oil well cleaner” Identified Use 5 “Metal surface treatment products, e.g. electroplating” Identified Use 6 “pH regulator” Identified Use 7 “Pulp and paper industry as a chloride stabilizer” Identified Use 10 “Cleaning metals and ceramics” Identified Use 11 “Surface disinfectant” Identified Use 12 “Laundry aid, laundry detergent” Identified Use 13 “Polishes and wax blends” Identified Use 14 “Non-metal surface treatment products” Identified Use 15 “Welding and soldering products, flux products” Identified Use 16 “Leather tanning industry for leather finishing” Identified Use 19 “Air care product”	
3. Description of activities/process(es) covered in the Exposure Scenario	
SU10 Formulation (mixing) of preparations and/or re-packaging PC 3 Air care products PC 8 Biocidal products (e.g. Disinfectants, pest control) PC 14 Metal surface treatment products, including galvanic and electroplating products PC 15 Non-metal-surface treatment products PC 20 Products such as pH-regulators, flocculants, precipitants, neutralization agents, other unspecific PC 23 Leather tanning, dye, finishing, impregnation and care products PC 26 Paper and board dye, finishing and impregnation products PC 31 Polishes and wax blends PC 35 Washing and cleaning products (including solvent based products) PC 38 Welding and soldering products, flux products PROC 3 Use in closed batch process (synthesis or formulation) PROC 4 Use in batch and other process (synthesis) where opportunity for exposure arises PROC 5 Mixing or blending in batch processes for formulation of preparations and articles (multistage and/or significant contact) PROC 7 Industrial spraying PROC 8a Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities PROC 8b Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities PROC 9 Transfer of substance or preparation into small containers (dedicated filling line, including weighing) PROC 13 Treatment of articles by dipping and pouring PROC 15 Use as laboratory reagent ERC2 Formulation of preparations	
4. Operational conditions	
4.1 Duration of use for which the ES ensures control of risk	Duration of use: >4 h/day (all PROCs)
4.2 Frequency of use for which the ES ensures control of risk	Not restricted
4.3 Amount of use for which the ES ensures control of risk	1000t/y(based on the worst case)
5. Substance properties and use parameters	
5.1 Physical form of product in which the substance is contained	Liquid/solid
5.1a Surface area per amount of article containing the substance (if applicable)	Not applicable
5.2 Concentration of substance in	0-100%

preparation	
5.3 Amount used per time or per activity for which the RMMs, in combination with other operational conditions of use ensure control of risk (if applicable)	Not restricted
6. Other operational conditions determining exposure	
Room volume	≥ 20m^3
Ventilation rate:	not specified
Temperature:	< 60 °C
Water flow rate:	not limited
Other operational conditions:	none
7. Risk Management Measures that, in combination with the operational conditions of use, ensure control of risk related to the different target groups	
7.1.1 Occupational measures	
Data type	**Data field**
General measure	
Skin contact inadmissible - Touching forbidden	Not to be used without protective gloves and eye protection Immediately eliminate or neutralize spilled solution. Do not inhale aerosols, fumes
Additional instruction,	Clean contaminated protective gloves with flowing water before taking off. Clean or take off protective clothing immediately after contaminating. Examine protective gloves for damage before beginning the activity.
Pour only with small heads (20 cm or less) or let liquid flow on the rim of container (avoidance of splashes)	Valid for all activities/all PROCs
Product-related measures	
Product-related measures	High viscosity adjustment with aids to avoid splashes Delivery only as barrel commodity and/or in the tank car (For all PROC).
Technical measures	Operation temperature: < 60 ℃
Organizational measures	
General measures	Handling permissible only after instruction on the dangers. Regular control of the effectiveness of the technical measures, Regular control of the application of the personal measures, (valid for all indicated activities/all above PROCs)
Additional measures	Entrance to production/processing only for technical personnel, Delivery only to the specialized trade. Hold only the quantity necessary for the processing ready.
Local exhaust ventilation required plus good work practise	Not addressed.
Personal protective equipment (PPE)	
	Hand protection: Disposable gloves for brief application Gloves with 8-hour break-through security for longer application, e.g. butyl rubber or nitrile rubber protective index 6, EN 372. **Eye protection:** Eye protector or goggles (all activities/PROCs), e.g. EN 166. **Respiratory protection:** Respiratory protection equipment. **Body protection:** Exposure suit for some activities with significant exposure possibility. **Other measures:** Take a shower and change clothes after work. Handling permissible only after instruction on the dangers. Regular control of the effectiveness of the technical measures,

	Regular control of the application of the personal measures, (valid for all indicated activities/all above PROCs)
7.1.2 Consumer related measures:	Not applicable for this Exposure Scenario
7.2 Environment related measures	It is recommended that rainwater, sanitary sewage and industrial waste water can be separated from the sewerage and disposed by the sewage disposal apparatus. Neutralize before introducing into open waters (Regular control of the pH value during introduction into open waters). Remainders on application devices with much water. Diluted before discharge when necessary.

8. Waste related measures needed to ensure control of risk at the different life cycle stages of the substances (including preparations or articles at the end of service life)

The wastes should be disposed of in according to local regulations. Avoid disposing into drainage systems and into the environment directly. The soiled packaging should be disposed of in the same way as the product.

Discharges of sulphamic Acid from production sites to sewage treatment plants (STP)/waste water treatment plants and receiving waters are well controlled. Taking into account the existing EU Directives for pH-control for surface water and national regulations to control the pH of waster waters and surface waters is concluded that STPs and surface waters are sufficiently protected with regard to pH changes.

9. Prediction of exposure resulting from the conditions described above

The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise indicated.

Predicted exposures are not expected to exceed the applicable exposure limits (DNEL as provided above) when the operational conditions/risk management measures described above are implemented.

The environmental exposure can be excluded taken into account the risk reduction measures which are already being applied.

10. Guidance to DU to evaluate whether he works inside the boundaries set by the ES

Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.

1. Exposure scenario title	ES 2: Professional use of cleaning and maintenance products, surface treatment products and/or biocidal products
2. Identified uses covered in the Exposure Scenario	
(ES 2 just covers the professional use processes of these end products) Identified Use 1 “Kitchen cleaner, dishwash product” Identified Use 2 “Floor and sanitary cleaner” Identified Use 4 “Oil well cleaner” Identified Use 10 “Cleaning metals and ceramics” Identified Use 11 “Surface disinfectant” Identified Use 12 “Laundry aid, laundry detergent” Identified Use 13 “Polishes and wax blends” Identified Use 14 “Non-metal surface treatment products” Identified Use 19 “Air care product”	
3. Description of activities/process(es) covered in the Exposure Scenario	
SU 22 “Professional uses: Public domain (administration, education, entertainment, services, craftsmen)” SU 2b “Offshore industries” PC 3 “Air care products” PC 8 “Biocidal products (e.g. Disinfectants, pest control)” PC 13 “Fuels” PC 15 “Non-metal-surface treatment products” PC 31 “Polishes and wax blends” PC 35 “Washing and cleaning products (including solvent based products)” PROC 1 “Use in closed process, no likelihood of exposure” PROC 2 “Use in closed, continuous process with occasional controlled exposure” PROC 4 “Use in batch and other process (synthesis) where opportunity for exposure arises” PROC 5 “Mixing or blending in batch processes for formulation of preparations and articles (multistage and/or significant contact)” PROC 8a “Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities” PROC 8b “Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities” PROC 9 “Transfer of substance or preparation into small containers (dedicated filling line, including weighing)” PROC 10 “Roller application or brushing” PROC 11 “Non industrial spraying” PROC 13 “Treatment of articles by dipping and pouring” PROC 16 “Using material as fuel sources, limited exposure to unburned product to be expected” PROC 17 “Lubrication at high energy conditions and in partly open process” PROC 19 “Hand-mixing with intimate contact and only PPE available” PROC 20 “Heat and pressure transfer fluids in dispersive, professional use but closed systems” ERC 8a “Wide dispersive indoor use of processing aids in open systems” ERC 8b “Wide dispersive indoor use of reactive substances in open systems” ERC 8d “Wide dispersive outdoor use of processing aids in open systems” ERC 9a “Wide dispersive indoor use of substances in closed systems” ERC 9b “Wide dispersive outdoor use of substances in closed systems”	
4. Operational conditions	
4.1 Duration of use for which the ES ensures control of risk	15 min –1 h/d (all PROCs)
4.2 Frequency of use for which the ES ensures control of risk	Not restricted
4.3 Amount of use for which the ES ensures control of risk	7 - 1000 t/y
5. Substance properties and use parameters	
5.1 Physical form of product in which the substance is contained	3%-15% solution
5.1a Surface area per amount of article containing the substance (if	Not applicable

applicable)	
5.2 Concentration of substance in preparation	3-15%
5.3 Amount used per time or per activity for which the RMMs, in combination with other operational conditions of use ensure control of risk (if applicable)	Not restricted
6. Other operational conditions determining exposure	
Room volume	≥ 20m^3
Ventilation rate:	not specified
Temperature:	<60 °C
Water flow rate:	not limited
Other operational conditions:	none
7. Risk Management Measures that, in combination with the operational conditions of use, ensure control of risk related to the different target groups	
7.1.1 Occupational measures	
Data type	**Data field**
General measure	
Skin contact inadmissible - Touching forbidden	Not to be used without protective gloves and eye protection Immediately eliminate or neutralize spilled solution, Do not inhale aerosols, fumes
Additional instruction,	Clean contaminated protective gloves with flowing water before taking off. Clean or take off protective clothing immediately after contaminating. Examine protective gloves for damage before beginning the activity.
Pour only with small heads (20 cm or less) or let liquid flow on the rim of container (avoidance of splashes)	Valid for all activities/all PROCs
Product-related measures	
Product-related measures	High viscosity adjustment with aids to avoid splashes Delivery only as barrel commodity and/or in the tank car (For all PROC).
Technical measures	Operation temperature: < 60 ℃
Organizational measures	
General measures	Handling permissible only after instruction on the dangers. Regular control of the effectiveness of the technical measures, Regular control of the application of the personal measures, (valid for all indicated activities/all above PROCs)
Additional measures	Entrance to production/processing only for technical personnel, Delivery only to the specialized trade. Hold only the quantity necessary for the processing ready.
Local exhaust ventilation required plus good work practise	Not addressed. Local exhaust ventilation is recommended.
Personal protective equipment (PPE)	
	Hand protection: Gloves with 8-hour break-through security for longer application, e.g. butyl rubber or nitrile rubber protective index 6, EN 372. **Eye protection:** Eye protector or goggles (all activities/PROCs), e.g. EN 166. **Respiratory protection:** Respiratory protection equipment. **Body protection:** Exposure suit for some activities with significant exposure possibility. **Other measures:** Take a shower and change clothes after work. Handling permissible only after instruction on the dangers. Regular control of the effectiveness of the technical measures, Regular control of the application of the personal measures, (valid for all

	indicated activities/all above PROCs)
7.1.2 Consumer related measures:	Not applicable for this Exposure Scenario
7.2 Environment related measures	Do not discharge to water directly. Diluted when necessary. Remainders on application devices with much water. No special information is available on onsite waste treatment. As the sulphamic acid may be recycled, reused or disposed by the manufacture or their downstream users, the discharge to wastes can be negligible.
8. Waste related measures needed to ensure control of risk at the different life cycle stages of the substances (including preparations or articles at the end of service life)	
The wastes should be disposed of in according to local regulations. Avoid disposing into drainage systems and into the environment directly. The soiled packaging should be disposed of in the same way as the product.	
9. Prediction of exposure resulting from the conditions described above	
The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise indicated. Predicted exposures are not expected to exceed the applicable exposure limits (DNEL as provided above) when the operational conditions/risk management measures described above are implemented. Environmental exposure can be excluded taken into account the risk reduction measures which are already being applied.	
10. Guidance to DU to evaluate whether he works inside the boundaries set by the ES	
Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.	

1.	Exposure scenario title	ES 3: Industrial use of cleaning and maintenance products, surface treatment products and/or biocidal products
2. Identified uses covered in the Exposure Scenario		
(ES 3 just covers the use processes of these end products in industrial sites) Identified Use 5 “Metal surface treatment products, e.g. electroplating” Identified Use 6 “pH regulator” Identified Use 7 “Pulp and paper industry as a chloride stabilizer” Identified Use 10 “Cleaning metals and ceramics” Identified Use 11 “Surface disinfectant” Identified Use 12 “Laundry aid, laundry detergent” Identified Use 15 “Welding and soldering products, flux products” Identified Use 16 “Leather tanning industry for leather finishing”		
3. Description of activities/process(es) covered in the Exposure Scenario		
SU 3 “Industrial uses: Uses of substance as such or in preparations at industrial sites “ SU 5 “Manufacture of textiles, leather, fur” SU 6b “Manufacture of pulp, paper and paper products” SU 8 “Manufacture of bulk, large scale chemicals (including petroleum products)” SU 15 “Manufacture of fabricated metal products, except machinery and equipment” PC 8 “Biocidal products (e.g. Disinfectants, pest control)” PC 14 “Metal surface treatment products, including galvanic and electroplating products” PC 20 “Products such as pH-regulators, flocculants, precipitants, neutralization agents, other unspecific” PC 23 “Leather tanning, dye, finishing, impregnation and care products” PC 26 “Paper and board dye, finishing and impregnation products” PC 35 “Washing and cleaning products (including solvent based products)” PC 38 “Welding and soldering products, flux products” PROC 2 “Use in closed, continuous process with occasional controlled exposure” PROC 3 “Use in closed batch process (synthesis or formulation)” PROC 4 “Use in batch and other process (synthesis) where opportunity for exposure arises” PROC 5 “Mixing or blending in batch processes for formulation of preparations and articles (multistage and/or significant contact)” PROC 7 “Industrial spraying” PROC 8a “Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities” PROC 8b “Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities” PROC 9 “Transfer of substance or preparation into small containers (dedicated filling line, including weighing)” PROC 10 “Roller application or brushing” PROC 13 “Treatment of articles by dipping and pouring” PROC 15 “Use as laboratory reagent” PROC 16 “Using material as fuel sources, limited exposure to unburned product to be expected” PROC 19 “Hand-mixing with intimate contact and only PPE available” PROC 25 “Other hot work operations with metals” ERC 4 “Industrial use of processing aids” ERC 6b “Industrial use of reactive processing aids”		
4. Operational conditions		
4.1	Duration of use for which the ES ensures control of risk	0.25 - 1.25 h/d
4.2	Frequency of use for which the ES ensures control of risk	Not restricted
4.3	Amount of use for which the ES ensures control of risk	100 - 750 t/y
5. Substance properties and use parameters		
5.1	Physical form of product in which the substance is contained	Liquid
5.1a	Surface area per amount of article containing the substance (if applicable)	Not applicable

5.2 Concentration of substance in use	100%
5.3 Amount used per time or per activity for which the RMMs, in combination with other operational conditions of use ensure control of risk (if applicable)	Not specified
6. Other operational conditions determining exposure	
Room volume	≥ 20 m^3
Ventilation rate:	not specified
Concentration of substance in preparation	3 % - 15 %
Temperature:	not restricted
Water flow rate:	not limited
Other operational conditions:	none
7. Risk Management Measures that, in combination with the operational conditions of use, ensure control of risk related to the different target groups	
7.1.1 Occupational measures	
Data type	**Data field**
General measure	
Skin contact inadmissible - Touching forbidden	Not to be used without protective gloves and eye protection Immediately eliminate or neutralize spilled solution, Do not inhale aerosols, fumes
Additional instruction,	Clean contaminated protective gloves with flowing water before taking off. Clean or take off protective clothing immediately after contaminating. Examine protective gloves for damage before beginning the activity.
Pour only with small heads (20 cm or less) or let liquid flow on the rim of container (avoidance of splashes)	Valid for all activities/all PROCs
Product-related measures	
Product-related measures	High viscosity adjustment with aids to avoid splashes Delivery only as barrel commodity and/or in the tank car (For all PROC).
Technical measures	Operation temperature: < 60 ℃
Organizational measures	
General measures	Handling permissible only after instruction on the dangers. Regular control of the effectiveness of the technical measures, Regular control of the application of the personal measures, (valid for all indicated activities/all above PROCs)
Additional measures	Entrance to production/processing only for technical personnel, Delivery only to the specialized trade. Hold only the quantity necessary for the processing ready.
Local exhaust ventilation required plus good work practise	Not addressed. Local exhaust ventilation is recommended.
Personal protective equipment (PPE)	
	Hand protection: Gloves with 8-hour break-through security for longer application, e.g. butyl rubber or nitrile rubber protective index 6, EN 372. **Eye protection:** Eye protector or goggles (all activities/PROCs), e.g. EN 166. **Respiratory protection:** Respiratory protection equipment. **Body protection:** Exposure suit for some activities with significant exposure possibility. **Other measures:** Take a shower and change clothes after work. Handling permissible only after instruction on the dangers. Regular control of the effectiveness of the technical measures,

	Regular control of the application of the personal measures, (valid for all indicated activities/all above PROCs)
7.1.2 Consumer related measures:	Not applicable for this Exposure Scenario
7.2 Environment related measures	It is recommended that rainwater, sanitary sewage and industrial waste water can be separated from the sewerage and disposed by the sewage disposal apparatus. Neutralize before introducing into open waters (Regular control of the pH value during introduction into open waters). Remainders on application devices with much water. Diluted before discharge when necessary.

8. Waste related measures needed to ensure control of risk at the different life cycle stages of the substances (including preparations or articles at the end of service life)

The wastes should be disposed of in according to local regulations. Avoid disposing into drainage systems and into the environment directly. The soiled packaging should be disposed of in the same way as the product.

Discharges of sulphamic acid from production sites to sewage treatment plants (STP)/waste water treatment plants and receiving waters are well controlled. Taking into account the existing EU Directives for pH-control for surface water and national regulations to control the pH of waster waters and surface waters is concluded that STPs and surface waters are sufficiently protected with regard to pH changes.

9. Prediction of exposure resulting from the conditions described above

The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise indicated.

Predicted exposures are not expected to exceed the applicable exposure limits (DNEL as provided above) when the operational conditions/risk management measures described above are implemented. Environmental exposure can be excluded taken into account the risk reduction measures which are already being applied.

10. Guidance to DU to evaluate whether he works inside the boundaries set by the ES

Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.

1. Exposure scenario title	**ES 4: Consumer use of cleaning and maintenance products**
2. Identified uses covered in the Exposure Scenario	
(ES 4 just covers the dispersive use processes of these end products) Identified Use 1 “Kitchen cleaner, dishwash product” Identified Use 2 “Floor and sanitary cleaner” Identified Use 11 “Surface disinfectant” Identified Use 12 “Laundry aid, laundry detergent”	
3. Description of activities/process(es) covered in the Exposure Scenario	
SU 20 “Health services” SU 21 “Consumer uses: Private households (=general public=consumers)” SU 23 “Electricity, steam, gas water supply and sewage treatment” PC 8 “Biocidal products (e.g. Disinfectants, pest control)” PC 35 “Washing and cleaning products (including solvent based products)” ERC 8a “Wide dispersive indoor use of processing aids in open systems” ERC 8b “Wide dispersive indoor use of reactive substances in open systems”	
4. Operational conditions	
4.1 Duration of use for which the ES ensures control of risk	Duration of use: not specified
4.2 Frequency of use for which the ES ensures control of risk	Frequency of use: 1 event / week
4.3 Amount of use for which the ES ensures control of risk	100 - 1000 t/y use within entire EU
5. Substance properties and use parameters	
5.1 Physical form of product in which the substance is contained	Liquid
5.1a Surface area per amount of article containing the substance (if applicable)	Not applicable
5.2 Concentration of substance in preparation	< 8%
5.3 Amount used per time or per activity for which the RMMs, in combination with other operational conditions of use ensure control of risk (if applicable)	Not specified
6. Other operational conditions determining exposure	
Room volume	≥ 20m^3
Inhalation rate:	1.37 m^3 / hour
Temperature:	Unless otherwise stated assumes use at ambient temperatures
Contact area:	1000 cm^3
Other operational conditions:	Covers use under typical household ventilation.
7. Risk Management Measures that, in combination with the operational conditions of use, ensure control of risk related to the different target groups	
7.1.1 Occupational measures	Not applicable for this Exposure Scenario
7.1.2 Consumer related measures:	Clean contaminated protective gloves with flowing water before taking off. Handling permissible only after instruction on the dangers. Keep away from children.
Personal protective equipment (PPE)	Direct contact with cleaning agents is not advised. Gloves can be used, e.g. butyl rubber or nitrile rubber protective index 6, EN 372
7.2 Environment related measures	Not specified.
8. Waste related measures needed to ensure control of risk at the different life cycle stages of the substances (including preparations or articles at the end of service life)	

The wastes should be disposed of in according to local regulations. The soiled packaging should be disposed of in the same way as the product.

9. Prediction of exposure resulting from the conditions described above

The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise indicated.

Predicted exposures are not expected to exceed the applicable exposure limits (DNEL as provided above) when the operational conditions/risk management measures described above are implemented. Environmental exposure can be excluded taken into account the risk reduction measures which are already being applied.

10. Guidance to DU to evaluate whether he works inside the boundaries set by the ES

Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.

1. Exposure scenario title	ES 5: Industrial use of sulphamic acid as foam cleaner in food process
2. Identified uses covered in the Exposure Scenario	
(ES 5 just covers the general use processes of this end product generated in the industrial sites) Identified Use 3 “Food process cleaner, foam cleaner”	
3. Description of activities/process(es) covered in the Exposure Scenario	
SU 3 “Industrial uses: Uses of substance as such or in preparations at industrial sites” PC 35 “Washing and cleaning products (including solvent based products)” PROC 1 “Use in closed process, no likelihood of exposure” PROC 4 “Use in batch and other process (synthesis) where opportunity for exposure arises” PROC 7 “Industrial spraying” PROC 8a “Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities” PROC 8b “Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities” PROC 11 “Non industrial spraying” PROC 13 “Treatment of articles by dipping and pouring” ERC 4 “Industrial use of processing aids”	
4. Operational conditions	
4.1 Duration of use for which the ES ensures control of risk	Duration of use: < 8 h/day (all PROCs)
4.2 Frequency of use for which the ES ensures control of risk	Not restricted
4.3 Amount of use for which the ES ensures control of risk	305 t/y
5. Substance properties and use parameters	
5.1 Physical form of product in which the substance is contained	Liquid
5.1a Surface area per amount of article containing the substance (if applicable)	Not applicable
5.2 Concentration of substance in preparation	Not specified
5.3 Amount used per time or per activity for which the RMMs, in combination with other operational conditions of use ensure control of risk (if applicable)	Not specified
6. Other operational conditions determining exposure	
Room volume	≥ 20m^3
Ventilation rate:	not specified
Temperature:	not restricted
Water flow rate:	not limited
Other operational conditions:	none
7. Risk Management Measures that, in combination with the operational conditions of use, ensure control of risk related to the different target groups	
7.1.1 Occupational measures	
Data type	**Data field**
General measure	
Skin contact inadmissible - Touching forbidden	Not to be used without protective gloves and eye protection Immediately eliminate or neutralize spilled solution, Do not inhale aerosols, fumes
Additional instruction,	Clean contaminated protective gloves with flowing water before taking off. Clean or take off protective clothing immediately after contaminating.

	Examine protective gloves for damage before beginning the activity.
Pour only with small heads (20 cm or less) or let liquid flow on the rim of container (avoidance of splashes)	Valid for all activities/all PROCs
Product-related measures	
Product-related measures	High viscosity adjustment with aids to avoid splashes. Delivery only as barrel commodity and/or in the tank car (For all PROC).
Technical measures	Operation temperature: < 60 ℃
Organizational measures	
General measures	Handling permissible only after instruction on the dangers. Regular control of the effectiveness of the technical measures, Regular control of the application of the personal measures, (valid for all indicated activities/all above PROCs)
Additional measures	Entrance to production/processing only for technical personnel, Delivery only to the specialized trade. Hold only the quantity necessary for the processing ready.
Local exhaust ventilation required plus good work practise	Local exhaust ventilation is recommended.
Personal protective equipment (PPE)	
	Hand protection: Gloves with 8-hour break-through security for longer application, e.g. butyl rubber or nitrile rubber protective index 6, EN 372. **Eye protection:** Eye protector or goggles (all activities/PROCs), e.g. EN 166. **Respiratory protection:** Respiratory protection equipment. **Body protection:** Exposure suit for some activities with significant exposure possibility. **Other measures:** Take a shower and change clothes after work. Handling permissible only after instruction on the dangers. Regular control of the effectiveness of the technical measures, Regular control of the application of the personal measures, (valid for all indicated activities/all above PROCs)
7.1.2 Consumer related measures:	Not applicable for this Exposure Scenario
7.2 Environment related measures	It is recommended that rainwater, sanitary sewage and industrial waste water can be separated from the sewerage and disposed by the sewage disposal apparatus. Neutralize before introducing into open waters (Regular control of the pH value during introduction into open waters). Remainders on application devices with much water. Diluted before discharge when necessary.
8. Waste related measures needed to ensure control of risk at the different life cycle stages of the substances (including preparations or articles at the end of service life)	
The wastes should be disposed of in according to local regulations. Avoid disposing into drainage systems and into the environment directly. The soiled packaging should be disposed of in the same way as the product. Discharges of sulphamic acid from production to sewage treatment plants (STP)/waste water treatment plants and receiving waters are well controlled.	
9. Prediction of exposure resulting from the conditions described above	
The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise indicated. Predicted exposures are not expected to exceed the applicable exposure limits (DNEL as provided above) when the operational conditions/risk management measures described above are implemented. Environmental exposure can be excluded taken into account the risk reduction measures which are already being applied.	
10. Guidance to DU to evaluate whether he works inside the boundaries set by the ES	
Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.	

1. Exposure scenario title	**ES 6: Industrial use of sulphamic acid for manufacture of urea-formaldehyde resins**
2. Identified uses covered in the Exposure Scenario	
(ES 6 just cover the industrial use of this end product) Identified Use 8 “Coagulator for urea-formaldehyde resins”	
3. Description of activities/process(es) covered in the Exposure Scenario	
SU 8 “Manufacture of bulk, large scale chemicals (including petroleum products)” PC 32 “Polymer preparations and compounds” PROC 4 “Use in batch and other process (synthesis) where opportunity for exposure arises” PROC 5 “Mixing or blending in batch processes for formulation of preparations and articles (multistage and/or significant contact)” PROC 8a “Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities” PROC 8b “Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities” PROC 15 “Use as laboratory reagent” ERC 1 “Production of chemicals” ERC2 “Formulation of preparations” ERC 6d “Production of resins/rubbers”	
4. Operational conditions	
4.1 Duration of use for which the ES ensures control of risk	Duration of use: < 8 h/day (all PROCs)
4.2 Frequency of use for which the ES ensures control of risk	Not restricted
4.3 Amount of use for which the ES ensures control of risk	780 t/y
5. Substance properties and use parameters	
5.1 Physical form of product in which the substance is contained	Liquid/solid
5.1a Surface area per amount of article containing the substance (if applicable)	Not applicable
5.2 Concentration of substance in preparation	Not specified
5.3 Amount used per time or per activity for which the RMMs, in combination with other operational conditions of use ensure control of risk (if applicable)	Not specified
6. Other operational conditions determining exposure	
Room volume	≥ 20 m^3
Ventilation rate:	not specified
Temperature:	< 60 °C
Water flow rate:	not limited
Other operational conditions:	none
7. Risk Management Measures that, in combination with the operational conditions of use, ensure control of risk related to the different target groups	
7.1.1 Occupational measures	
Data type	**Data field**
General measure	
Skin contact inadmissible - Touching forbidden	Not to be used without protective gloves and eye protection Immediately eliminate or neutralize spilled solution, Do not inhale aerosols, fumes
Additional instruction,	Clean contaminated protective gloves with flowing water before taking off. Clean or take off protective clothing immediately after contaminating.

	Examine protective gloves for damage before beginning the activity.
Pour only with small heads (20 cm or less) or let liquid flow on the rim of container (avoidance of splashes)	Valid for all activities/all PROCs
Product-related measures	
Product-related measures	High viscosity adjustment with aids to avoid splashes. Delivery only as barrel commodity and/or in the tank car (For all PROC).
Technical measures	Operation temperature: < 60 ℃
Organizational measures	
General measures	Handling permissible only after instruction on the dangers. Regular control of the effectiveness of the technical measures, Regular control of the application of the personal measures, (valid for all indicated activities/all above PROCs)
Additional measures	Entrance to production/processing only for technical personnel, Delivery only to the specialized trade. Hold only the quantity necessary for the processing ready.
Local exhaust ventilation required plus good work practise	Local exhaust ventilation is recommended.
Personal protective equipment (PPE)	
	Hand protection: Gloves with 8-hour break-through security for longer application, e.g. butyl rubber or nitrile rubber protective index 6, EN 372. **Eye protection:** Eye protector or goggles (all activities/PROCs), e.g. EN 166. **Respiratory protection:** Respiratory protection equipment. **Body protection:** Exposure suit for some activities with significant exposure possibility. **Other measures:** Take a shower and change clothes after work. Handling permissible only after instruction on the dangers. Regular control of the observance of the instructions - sanctioning for offence, Regular control of the effectiveness of the technical measures, Regular control of the application of the personal measures, (valid for all indicated activities/all above PROCs)
7.1.2 Consumer related measures:	Not applicable for this Exposure Scenario
7.2 Environment related measures	It is recommended that rainwater, sanitary sewage and industrial waste water can be separated from the sewerage and disposed by the sewage disposal apparatus. Neutralize before introducing into open waters (Regular control of the pH value during introduction into open waters). Remainders on application devices with much water. Diluted before discharge when necessary.
8. Waste related measures needed to ensure control of risk at the different life cycle stages of the substances (including preparations or articles at the end of service life)	
The wastes should be disposed of in according to local regulations. Avoid disposing into drainage systems and into the environment directly. The soiled packaging should be disposed of in the same way as the product. Discharges of sulphamic acid from production to sewage treatment plants (STP)/waste water treatment plants and receiving waters are well controlled.	
9. Prediction of exposure resulting from the conditions described above	
The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise indicated. Predicted exposures are not expected to exceed the applicable exposure limits (DNEL as provided above) when the operational conditions/risk management measures described above are implemented. Environmental exposure can be excluded taken into account the risk reduction measures which are already being applied.	
10. Guidance to DU to evaluate whether he works inside the boundaries set by the ES	
Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.	

1. Exposure scenario title	**ES 7: Industrial use of sulphamic acid as nitrite remover in dye and pigment manufacture**
2. Identified uses covered in the Exposure Scenario	
(ES 7 just covers the industrial use process for this end product) Identified Use 9 “Nitrite remover in dye and pigment manufacture”	
3. Description of activities/process(es) covered in the Exposure Scenario	
SU 3 “Industrial uses: Uses of substance as such or in preparations at industrial sites” PC 34 “Textile dyes, finishing and impregnating products” PROC 5 “Mixing or blending in batch processes for formulation of preparations and articles (multistage and/or significant contact)” ERC2 “Formulation of preparations” ERC 4 “Industrial use of processing aids”	
4. Operational conditions	
4.1 Duration of use for which the ES ensures control of risk	Duration of use: > 4 h/day (all PROCs)
4.2 Frequency of use for which the ES ensures control of risk	Not restricted
4.3 Amount of use for which the ES ensures control of risk	60 t/y
5. Substance properties and use parameters	
5.1 Physical form of product in which the substance is contained	Liquid
5.1a Surface area per amount of article containing the substance (if applicable)	Not applicable
5.2 Concentration of substance in preparation	Not specified
5.3 Amount used per time or per activity for which the RMMs, in combination with other operational conditions of use ensure control of risk (if applicable)	Not specified
6. Other operational conditions determining exposure	
Room volume	≥ 20m^3
Ventilation rate:	not specified
Temperature:	not restricted
Water flow rate:	not limited
Other operational conditions:	none
7. Risk Management Measures that, in combination with the operational conditions of use, ensure control of risk related to the different target groups	
7.1.1 Occupational measures	
Data type	**Data field**
General measure	
Skin contact inadmissible - Touching forbidden	Not to be used without protective gloves and eye protection Immediately eliminate or neutralize spilled solution, Do not inhale aerosols, fumes
Additional instruction,	Clean contaminated protective gloves with flowing water before taking off. Clean or take off protective clothing immediately after contaminating. Examine protective gloves for damage before beginning the activity.
Pour only with small heads (20 cm or less) or let liquid flow on the rim of container (avoidance of splashes)	Valid for all activities/all PROCs
Product-related measures	

Product-related measures	High viscosity adjustment with aids to avoid splashes. Delivery only as barrel commodity and/or in the tank car (For all PROC).
Technical measures	Operation temperature: < 60 ℃
Organizational measures	
General measures	Handling permissible only after instruction on the dangers. Regular control of the effectiveness of the technical measures, Regular control of the application of the personal measures, (valid for all indicated activities/all above PROCs)
Additional measures	Entrance to production/processing only for technical personnel, Delivery only to the specialized trade. Hold only the quantity necessary for the processing ready.
Local exhaust ventilation required plus good work practise	Local exhaust ventilation is recommended.
Personal protective equipment (PPE)	
	Hand protection: Gloves with 8-hour break-through security for longer application, e.g. butyl rubber or nitrile rubber protective index 6, EN 372. **Eye protection:** Eye protector or goggles (all activities/PROCs), e.g. EN 166. **Respiratory protection:** Respiratory protection equipment. **Body protection:** Exposure suit for some activities with significant exposure possibility. **Other measures:** Take a shower and change clothes after work. Handling permissible only after instruction on the dangers. Regular control of the effectiveness of the technical measures, Regular control of the application of the personal measures, (valid for all indicated activities/all above PROCs)
7.1.2 Consumer related measures:	Not applicable for this Exposure Scenario
7.2 Environment related measures	It is recommended that rainwater, sanitary sewage and industrial waste water can be separated from the sewerage and disposed by the sewage disposal apparatus. Neutralize before introducing into open waters (Regular control of the pH value during introduction into open waters). Remainders on application devices with much water. Diluted before discharge when necessary.
8. Waste related measures needed to ensure control of risk at the different life cycle stages of the substances (including preparations or articles at the end of service life)	
The wastes should be disposed of in according to local regulations. Avoid disposing into drainage systems and into the environment directly. The soiled packaging should be disposed of in the same way as the product. Discharges of sulphamic acid from production to sewage treatment plants (STP)/waste water treatment plants and receiving waters are well controlled.	
9. Prediction of exposure resulting from the conditions described above	
The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise indicated. Predicted exposures are not expected to exceed the applicable exposure limits (DNEL as provided above) when the operational conditions/risk management measures described above are implemented. Environmental exposure can be excluded taken into account the risk reduction measures which are already being applied.	
10. Guidance to DU to evaluate whether he works inside the boundaries set by the ES	
Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.	

1. Exposure scenario title	ES 8: Professional use of sulphamic acid as plasticizer in production of thermosetting plastics (e.g. phenolics)
2. Identified uses covered in the Exposure Scenario	
(ES 8 just covers the industrial use process of Sulfamic acid as Plasticizer) Identified Use 17 “Plasticizer”	
3. Description of activities/process(es) covered in the Exposure Scenario	
SU 22 “Professional uses: Public domain (administration, education, entertainment, services, craftsmen)” PC 32 “Polymer preparations and compounds” PROC 2 “Use in closed, continuous process with occasional controlled exposure” PROC 8a “Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities” PROC 8b “Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities” PROC 10 “Roller application or brushing” PROC 11 “Non industrial spraying” PROC 16 “Using material as fuel sources, limited exposure to unburned product to be expected” PROC 17 “Lubrication at high energy conditions and in partly open process” PROC 20 “Heat and pressure transfer fluids in dispersive, professional use but closed systems” ERC 8a “Wide dispersive indoor use of processing aids in open systems” ERC 8d “Wide dispersive outdoor use of processing aids in open systems” ERC 9a “Wide dispersive indoor use of substances in closed systems” ERC 9b “Wide dispersive outdoor use of substances in closed systems”	
4. Operational conditions	
4.1 Duration of use for which the ES ensures control of risk	No data available
4.2 Frequency of use for which the ES ensures control of risk	Not specified
4.3 Amount of use for which the ES ensures control of risk	No data available
5. Substance properties and use parameters	
5.1 Physical form of product in which the substance is contained	Liquid/solid
5.1a Surface area per amount of article containing the substance (if applicable)	Not applicable
5.2 Concentration of substance in preparation	Not specified
5.3 Amount used per time or per activity for which the RMMs, in combination with other operational conditions of use ensure control of risk (if applicable)	Not specified
6. Other operational conditions determining exposure	
Room volume	≥ 20m^3
Ventilation rate:	not specified
Temperature:	< 60 °C
Water flow rate:	not limited
Other operational conditions:	none
7. Risk Management Measures that, in combination with the operational conditions of use, ensure control of risk related to the different target groups	
7.1.1 Occupational measures	
Data type	**Data field**
General measure	
Skin contact inadmissible - Touching forbidden	Not to be used without protective gloves and eye protection Immediately eliminate or neutralize spilled solution,

	Do not inhale aerosols, fumes
Additional instruction,	Clean contaminated protective gloves with flowing water before taking off. Clean or take off protective clothing immediately after contaminating. Examine protective gloves for damage before beginning the activity.
Pour only with small heads (20 cm or less) or let liquid flow on the rim of container (avoidance of splashes)	Valid for all activities/all PROCs
Product-related measures	
Product-related measures	High viscosity adjustment with aids to avoid splashes. Delivery only as barrel commodity and/or in the tank car (For all PROC).
Technical measures	Operation temperature: < 60 ℃
Organizational measures	
General measures	Handling permissible only after instruction on the dangers. Regular control of the effectiveness of the technical measures, Regular control of the application of the personal measures, (valid for all indicated activities/all above PROCs)
Additional measures	Entrance to production/processing only for technical personnel, Delivery only to the specialized trade. Hold only the quantity necessary for the processing ready.
Local exhaust ventilation required plus good work practise	Local exhaust ventilation is recommended.
Personal protective equipment (PPE)	
	Hand protection: Gloves with 8-hour break-through security for longer application, e.g. butyl rubber or nitrile rubber protective index 6, EN 372. **Eye protection:** Eye protector or goggles (all activities/PROCs), e.g. EN 166. **Respiratory protection:** Respiratory protection equipment. **Body protection:** Exposure suit for some activities with significant exposure possibility. **Other measures:** Take a shower and change clothes after work. Handling permissible only after instruction on the dangers. Regular control of the effectiveness of the technical measures, Regular control of the application of the personal measures, (valid for all indicated activities/all above PROCs)
7.1.2 Consumer related measures:	Not applicable for this Exposure Scenario
7.2 Environment related measures	Do not discharge to water directly. Diluted when necessary. Remainders on application devices with much water. The waste gas should not be discharged to the air directly. No special information is available on onsite waste treatment. As the sulphamic acid may be recycled, reused or disposed by the manufacture or their downstream users, the discharge to wastes can be negligible. Recovery of sludge for agriculture or horticulture is forbidden.

8. Waste related measures needed to ensure control of risk at the different life cycle stages of the substances (including preparations or articles at the end of service life)

The wastes should be disposed of in according to local regulations. Avoid disposing into drainage systems and into the environment directly. The soiled packaging should be disposed of in the same way as the product.

9. Prediction of exposure resulting from the conditions described above

The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise indicated.

Predicted exposures are not expected to exceed the applicable exposure limits (DNEL as provided above) when the operational conditions/risk management measures described above are implemented. Environmental exposure can be excluded taken into account the risk reduction measures which are already being applied.

10.	Guidance to DU to evaluate whether he works inside the boundaries set by the ES
	Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.

1. Exposure scenario title	ES 9: Industrial use of sulphamic acid for synthesis of sweeteners
Identified uses covered in the Exposure Scenario	
(ES 9 just covers the industrial use of the sulphamic acid in synthesis of sweeteners) Identified Use 18: “Synthesis of sweeteners”	
3. Description of activities/process(es) covered in the Exposure Scenario	
SU 4 “Manufacture of food products” PC 19 “Intermediate” PROC 3 “Use in closed batch process (synthesis or formulation)” ERC 1 “Production of chemicals”	
4. Operational conditions	
4.1 Duration of use for which the ES ensures control of risk	Not specified
4.2 Frequency of use for which the ES ensures control of risk	Not specified
4.3 Amount of use for which the ES ensures control of risk	1000 t/y
5. Substance properties and use parameters	
5.1 Physical form of product in which the substance is contained	Solid
5.1a Surface area per amount of article containing the substance (if applicable)	Not applicable
5.2 Concentration of substance in preparation	Not specified
5.3 Amount used per time or per activity for which the RMMs, in combination with other operational conditions of use ensure control of risk (if applicable)	Not specified
6. Other operational conditions determining exposure	
Room volume	≥ 20 m^3
Ventilation rate:	not specified
Temperature:	< 60 °C
Water flow rate:	not limited
Other operational conditions:	none
7. Risk Management Measures that, in combination with the operational conditions of use, ensure control of risk related to the different target groups	
7.1.1 Occupational measures	
Data type	**Data field**
General measure	
Skin contact inadmissible - Touching forbidden	Not to be used without protective gloves and eye protection Immediately eliminate or neutralize spilled solution, Do not inhale aerosols, fumes
Additional instruction,	Clean contaminated protective gloves with flowing water before taking off. Clean or take off protective clothing immediately after contaminating. Examine protective gloves for damage before beginning the activity.
Pour only with small heads (20 cm or less) or let liquid flow on the rim of container (avoidance of splashes)	Valid for all activities/all PROCs
Product-related measures	
Product-related measures	High viscosity adjustment with aids to avoid splashes. Delivery only as barrel commodity and/or in the tank car (For all PROC).
Technical measures	Operation temperature: < 60 ℃

Organizational measures	
General measures	Handling permissible only after instruction on the dangers. Regular control of the effectiveness of the technical measures, Regular control of the application of the personal measures, (valid for all indicated activities/all above PROCs)
Additional measures	Entrance to production/processing only for technical personnel, Delivery only to the specialized trade. Hold only the quantity necessary for the processing ready.
Local exhaust ventilation required plus good work practise	Local exhaust ventilation is recommended.
Personal protective equipment (PPE)	
	Hand protection: Gloves with 8-hour break-through security for longer application, e.g. butyl rubber or nitrile rubber protective index 6, EN 372. **Eye protection:** Eye protector or goggles (all activities/PROCs), e.g. EN 166. **Respiratory protection:** Respiratory protection equipment. **Body protection:** Exposure suit for some activities with significant exposure possibility. **Other measures:** Take a shower and change clothes after work. Handling permissible only after instruction on the dangers. Regular control of the effectiveness of the technical measures, Regular control of the application of the personal measures, (valid for all indicated activities/all above PROCs)
7.1.2 Consumer related measures:	Not applicable for this Exposure Scenario
7.2 Environment related measures	Do not discharge to water directly. Diluted when necessary. Remainders on application devices with much water. The waste gas should not be discharged to the air directly. No special information is available on onsite waste treatment. As the sulphamic acid may be recycled, reused or disposed by the manufacture or their downstream users, the discharge to wastes can be negligible. Recovery of sludge for agriculture or horticulture is forbidden.

8. Waste related measures needed to ensure control of risk at the different life cycle stages of the substances (including preparations or articles at the end of service life)

The wastes should be disposed of in according to local regulations. Avoid disposing into drainage systems and into the environment directly. The soiled packaging should be disposed of in the same way as the product.

9. Prediction of exposure resulting from the conditions described above

The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise indicated.

Predicted exposures are not expected to exceed the applicable exposure limits (DNEL as provided above) when the operational conditions/risk management measures described above are implemented. Environmental exposure can be excluded taken into account the risk reduction measures which are already being applied.

10. Guidance to DU to evaluate whether he works inside the boundaries set by the ES

Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.

1. Exposure scenario title	**ES 10: Industrial use of sulphamic acid as composite additive for hardening control of amino resins**
2. Identified uses covered in the Exposure Scenario	
(ES 10 just covers the industrial use of the Sulfamic acid as composite additive for hardening control of amino resins) Identified Use 20 "Composite additive for hardening control of amino resins"	
3. Description of activities/process(es) covered in the Exposure Scenario	
SU 3 "Industrial uses: Uses of substance as such or in preparations at industrial sites" PC 1 "Adhesives, sealants" PROC 5 "Mixing or blending in batch processes for formulation of preparations and articles (multistage and/or significant contact)" PROC 8a "Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities" PROC 8b "Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities" ERC2 "Formulation of preparations" ERC 6d "Production of resins/rubbers"	
4. Operational conditions	
4.1 Duration of use for which the ES ensures control of risk	> 4 h/d
4.2 Frequency of use for which the ES ensures control of risk	Not specified
4.3 Amount of use for which the ES ensures control of risk	15-100 t/y
5. Substance properties and use parameters	
5.1 Physical form of product in which the substance is contained	Liquid
5.1a Surface area per amount of article containing the substance (if applicable)	Not applicable
5.2 Concentration of substance in preparation	Not specified
5.3 Amount used per time or per activity for which the RMMs, in combination with other operational conditions of use ensure control of risk (if applicable)	Not specified
6. Other operational conditions determining exposure	
Room volume	≥ 20 m^3
Ventilation rate:	not specified
Temperature:	< 60 °C
Water flow rate:	not limited
Other operational conditions:	none
7. Risk Management Measures that, in combination with the operational conditions of use, ensure control of risk related to the different target groups	
7.1.1 Occupational measures	
Data type	**Data field**
General measure	
Skin contact inadmissible - Touching forbidden	Not to be used without protective gloves and eye protection Immediately eliminate or neutralize spilled solution, Do not inhale aerosols, fumes
Additional instruction,	Clean contaminated protective gloves with flowing water before taking off. Clean or take off protective clothing immediately after contaminating. Examine protective gloves for damage before beginning the activity.
Pour only with small heads (20 cm or less) or let liquid flow on the rim of container	Valid for all activities/all PROCs

(avoidance of splashes)	
Product-related measures	
Product-related measures	High viscosity adjustment with aids to avoid splashes. Delivery only as barrel commodity and/or in the tank car (For all PROC).
Technical measures	Operation temperature: < 60 ℃
Organizational measures	
General measures	Handling permissible only after instruction on the dangers. Regular control of the effectiveness of the technical measures, Regular control of the application of the personal measures, (valid for all indicated activities/all above PROCs)
Additional measures	Entrance to production/processing only for technical personnel, Delivery only to the specialized trade. Hold only the quantity necessary for the processing ready.
Local exhaust ventilation required plus good work practise	Local exhaust ventilation is recommended.
Personal protective equipment (PPE)	
	Hand protection: Gloves with 8-hour break-through security for longer application, e.g. butyl rubber or nitrile rubber protective index 6, EN 372. **Eye protection:** Eye protector or goggles (all activities/PROCs), e.g. EN 166. **Respiratory protection:** Respiratory protection equipment. **Body protection:** Exposure suit for some activities with significant exposure possibility. **Other measures:** Take a shower and change clothes after work. Handling permissible only after instruction on the dangers. Regular control of the effectiveness of the technical measures, Regular control of the application of the personal measures, (valid for all indicated activities/all above PROCs)
7.1.2 Consumer related measures:	Not applicable for this Exposure Scenario
7.2 Environment related measures	It is recommended that rainwater, sanitary sewage and industrial waste water can be separated from the sewerage and disposed by the sewage disposal apparatus. Neutralize before introducing into open waters (Regular control of the pH value during introduction into open waters). Remainders on application devices with much water. Diluted before discharge when necessary.
8. Waste related measures needed to ensure control of risk at the different life cycle stages of the substances (including preparations or articles at the end of service life)	
The wastes should be disposed of in according to local regulations. Avoid disposing into drainage systems and into the environment directly. The soiled packaging should be disposed of in the same way as the product. Discharges of sulphamic acid from production to sewage treatment plants (STP)/waste water treatment plants and receiving waters are well controlled.	
9. Prediction of exposure resulting from the conditions described above	
The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise indicated. Predicted exposures are not expected to exceed the applicable exposure limits (DNEL as provided above) when the operational conditions/risk management measures described above are implemented. Environmental exposure can be excluded taken into account the risk reduction measures which are already being applied.	
10. Guidance to DU to evaluate whether he works inside the boundaries set by the ES	
Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.	

Appendix: Abbreviations used in this exposure scenario document

AC	Article category
DNEL	Derived no effect level
DU	Downstream user
ECETOC TRA	Targeted Risk Assessment Tool provided by ECETOC (European Centre for Ecotoxicology and Toxicology of Chemicals)
ERC	Environmental release category
ES	Exposure scenario
OC	Operational conditions
PC	Product category
PEC	Predicted environmental concentration
PNEC	Predicted no effect concentration
PROC	Process category
RMM	Risk management measures
SU	Sector of use