

Sigurnosno-tehničkog lista**ACTIVE ONE**

Sigurnosno-tehničkog lista, datum: 21/06/2023 Opis version 1

Upozorenje: označavanje brojevima ide od 1.

ODJELJAK 1.: Identifikacija tvari/smjese i podaci o društvu/poduzeću**1.1. Identifikacijska oznaka proizvoda**

Identifikacija preparata:

Trgovačko ime: ACTIVE ONE

Trgovački kod: COLA01

UFI: N300-F07R-H00Q-AWQG

1.2. Utvrđene relevantne uporabe tvari ili smjese i uporabe koje se ne preporučuju

Preporučana upotreba: deterdžent

1.3. Podaci o dobavljaču koji isporučuje sigurnosno-tehnički list

Tvrtka: FASSA Srl

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Odgovorna osoba: laboratorio.spresiano@fassabortolo.it

1.4. Broj telefona za izvanredna stanja

+3851 2348 342

ODJELJAK 2.: Identifikacija opasnosti**2.1. Razvrstavanje tvari ili smjese****Uredba (EC) br. 1272/2008 (CLP)**

Met. Corr. 1	Može nagrizzati metale.
Skin Corr. 1B	Uzrokuje teške opekline kože i ozljede oka.
Eye Dam. 1	Uzrokuje teške ozljede oka.
Aquatic Acute 1	Vrlo otrovno za vodeni okoliš.
Aquatic Chronic 2	Otrovno za vodeni okoliš s dugotrajnim učincima.

Fizikalno-kemijski učinci štetni po ljudsko zdravlje i okoliš:

Nema ostalih rizika

2.2. Elementi označivanja**Uredba (EC) br. 1272/2008 (CLP):****Piktogrami i oznaka opasnosti**

Opasnost

Oznake upozorenja

H290	Može nagrizzati metale.
H314	Uzrokuje teške opekline kože i ozljede oka.
H410	Vrlo otrovno za vodeni okoliš, s dugotrajnim učincima.

Oznake obavijesti

P101	Ako je potrebna liječnička pomoć pokazati spremnik ili naljepnicu.
P102	Čuvati izvan dohvata djece.
P234	Čuvati samo u originalnom pakiranju.
P260	Nemojte udisati dimove/plinove/maglicu/pare/aerosole.
P280	Nositi zaštitne rukavice/zaštitno odijelo te zaštitu za oči/zaštitu za lice.
P301+P330+P331	AKO SE PROGUTA: isprati usta. NE izazivati povraćanje.

1

- P303+P361+P353 U SLUČAJU DODIRA S KOŽOM (ili kosom): odmah skinuti svu zagađenu odjeću. Isprati kožu vodom ili tuširanjem.
- P305+P351+P338 U SLUČAJU DODIRA S OČIMA: oprezno ispirati vodom nekoliko minuta. Ukloniti kontaktne leće ako ih nosite i ako se one lako uklanjaju. Nastaviti ispirati.
- P310 Odmah nazvati CENTAR ZA KONTROLU OTROVANJA/liječnika.
- P405 Skladištiti pod ključem.
- P501 Odložiti sadržaj/spremnik u skladu s nacionalnim propisima.

Posebna osiguranja:

- EUH031 U dodiru s kiselinama oslobađa otrovni plin.
- PACK1 Pakiranje mora imati sigurnosni zatvarač za djecu.
- PACK2 Pakiranje mora imati taktilno upozorenje za opasnosti za slijepe.
- EUH206 Upozorenje! Ne koristiti s drugim proizvodima. Mogu se osloboditi opasni plinovi (klor).

Sadrži:

natrijev hipoklorit, otopina 14% aktivnog Cl

Posebne odredbe prema Prilogu XVII REACH-a i naknadnih amandmana:

Niti jedan

2.3. Ostale opasnosti

Bez PBT-a, vPvB-a ili endokrinih disruptora prisutnih u koncentraciji > = 0,1 %.

Napomene o sastojcima u skladu s Ured. (EZ) br. 648/2004: < 5 % neionskih površinski aktivnih tvari, fosfonata; između 5 i 15 % izbjeljivača na bazi klora.

Pažnja: ne upotrebljavajte u kombinaciji s drugim proizvodima. Mogu nastati opasni plinovi (klor).

Nema ostalih rizika

ODJELJAK 3.: Sastav/informacije o sastojcima

3.1. Tvari

Ne primjenjuje se.

3.2. Smjese

Identifikacija preparata: ACTIVE ONE

Opasni sastojci u smislu CLP Uredbe koja se odnosi na razvrstavanje:

Količina	Naziv	Ident. Broj.	Klasifikacija	Broj registriranih slučajeva
≥ 80%	natrijev hipoklorit, otopina 14% aktivnog Cl	CAS:7681-52-9 EC:231-668-3 Index:017-011-00-1	Met. Corr. 1, H290 Skin Corr. 1B, H314 Eye Dam. 1, H318 Aquatic Acute 1, H400 Aquatic Chronic 2, H411, M-Chronic:1, M-Acute:10, EUH031 Specifične granične vrijednosti koncentracije: 5% ≤ C < 100%: EUH031	01-2119488154-34-xxxx
≥0.3 - <0.5 %	N,N-dimetiltetradecilamin-N-oksida	CAS:3332-27-2 EC:222-059-3	Acute Tox. 4, H302; Eye Dam. 1, H318; Skin Irrit. 2, H315; Aquatic Acute 1, H400; Aquatic Chronic 2, H411, M-Acute:1	01-2119949262-37-xxxx

ODJELJAK 4.: Mjere prve pomoći

4.1. Opis mjera prve pomoći

U slučaju kontakta sa kožom:

- Smjesta skinuti zagađenu odjeću i ukloniti je na bezbjedan način.
- Odmah oprati obilnom količinom tekuće vode i eventualno sapunom dijelove tijela koji su došli u dodir s proizvodom, čak i u slučaju da samo sumnjate da je došlo do kontakta.
- ODMAH NAZVATI MEDICINSKU EKIPU ZA HITNU POMOĆ

U slučaju kontakta sa očima:

- U slučaju kontakta sa očima, ispirati oči vodom neko vrijeme, držati otvorene kapke, a potom zatražiti pomoć oftalmologa.
- Zaštititi neozlijeđeno oko.

U slučaju gutanja:

- Ne poticati povraćanje, obratiti se liječniku i pokazati listić o sigurnosti i oznaku kemijskog rizika.

U slučaju udisanja:

Izloženu osobu treba iznijeti na svježi zrak, držati je na toplom, a ista mora mirovati.

4.2. Najvažniji simptomi i učinci, akutni i odgođeni

Simptomi i učinci su u skladu s očekivanjima od opasnosti kako je prikazano u 2. odjeljku.

4.3. Navod o potrebi za hitnom liječničkom pomoći i posebnom obradom

U slučaju nesreće ili slabosti smjesta se obratiti liječniku (ako je moguće, pokazati upute za uporabu ili sigurnosni list).

ODJELJAK 5.: Mjere za suzbijanje požara

5.1. Sredstva za gašenje

Prikladna sredstva za gašenje požara:

Proizvod nije zapaljiv

Sredstva za gašenje požara koja ne treba koristiti iz bezbjednosnih razloga:

Nijedno posebno.

5.2. Posebne opasnosti koje proizlaze iz tvari ili smjese

Sagorijevanjem se oslobađaju teški dimovi.

U slučaju požara i/ili eksplozije, ne udisati dimne plinove.

5.3. Savjeti za gasitelje požara

Koristiti prikladne dišne aparate.

Posebno pokupiti zaprljanu vodu, koja je korištena za gašenje požara. Ne bacati ovu vodu u kanalizacionu mrežu.

Neoštećene spremnike skloniti iz prostora neposredne opasnosti, ukoliko se to može izvršiti na bezbjedan način.

ODJELJAK 6.: Mjere kod slučajnog ispuštanja

6.1. Osobne mjere opreza, zaštitna oprema i postupci za izvanredna stanja

Koristiti sredstva za osobnu zaštitu.

Ukloniti osobe na sigurno mjesto.

Konzultirati mjere zaštite opisane u točkama 7. i 8.

6.2. Mjere zaštite okoliša

Spriječiti prodiranje u tlo/dublje slojeve zemlje. Spriječiti ulivanje u površinske vode ili u kanalizacionu mrežu.

U slučaju izlaska plina ili prodiranja u vodene tokove, tlo ili kanalizacionu mrežu, obavijestiti nadležna tijela.

6.3. Metode i materijal za sprečavanje širenja i čišćenje

Materijal je prikladan za skupljanje: inertni upijajući materijal (npr. pijesak, vermikulit)

Nakon što je proizvod sakupljen, isprati onečišćeno područje i predmete s vodom.

Zadržati vodu kojom ste izvršili pranje, pa je eliminirati.

6.4. Uputa na druge odjeljke

Pogledati također i paragrafe 8. i 13.

ODJELJAK 7.: Rukovanje i skladištenje

7.1. Mjere opreza za sigurno rukovanje

Izbjegavati dodir s kožom i očima, udisanje para i maglica.

Ne koristite prazne spremnike prije no što ih očistite.

Prije prijenosa proizvoda, uvjeriti se da u spremnicima nema ostataka nekompatibilnih tvari.

Savjeti o općoj higijeni na radnom mjestu:

Kontaminirana odjeća se smjesta mora zamijeniti prije ulaska u menze.

Ne konzumirati hranu i piće na radnom mjestu.

Pogledati i paragraf 8. u svezi sa preporučenim napravama za zaštitu.

7.2. Uvjeti sigurnog skladištenja, uzimajući u obzir moguće inkompatibilnosti

Čuvati spremnike dobro zatvorene na hladnom i dobro prozračenom mjestu daleko od izvora topline.

Ne preljevati proizvod u druge spremnike. Uvijek koristiti originalno pakiranje.

Držati podalje od hrane, pića i krmiva.

Inkompatibilne tvari:

Vidi točku 10.5

Držati dalje od kiselina.

Upute za prostorije za skladištenje:

Adekvatno prozračene prostorije.

Zaštititi od smrzavanja.

7.3. Posebna krajnja uporaba ili uporabe

Preporuke

Vidi točku 1.2

Specifične otopine za industrijski sektor

Nema posebne upotrebe

ODJELJAK 8.: Nadzor nad izloženosti/osobna zaštita

8.1. Nadzorni parametri

Spisak komponenti sa OEL vrijedostima

	OEL Tip	Dugoročno mg/m ³	Dugoročno ppm	Kratkoročno mg/m ³	Kratkoročno ppm	Napomen
natrijev hipoklorit, otopina 14% aktivnog Cl CAS: 7681-52-9	UE			1.5	0.5	
	ACGIH		0.1		0.4	

Granične vrijednosti izloženosti PNEC

	PNEC Ograni čiti	Putevi izloženosti	Učestalost izloženosti	Primjedbe
natrijev hipoklorit, otopina 14% aktivnog Cl CAS: 7681-52-9	0.042 µg/l	Morska voda		
	0.21 µg/l	Svježa voda		
	4.69 mg/l	Mikroorganizmi u postrojenjima za obradu otpadnih voda (STP)		
	11.1 mg/kg	Hranidbeni lanac		

Izvedena razina bez učinka. (DNEL)

	Industrijski djelatnik	Profesionalni djelatnik	Potrošač	Putevi izloženosti	Učestalost izloženosti	Primjedbe
natrijev hipoklorit, otopina 14% aktivnog Cl CAS: 7681-52-9	3.1 mg/m ³	3.1 mg/m ³	3.1 mg/m ³	Ljudi inhalacijski	Kratkotrajni, sistemski učinci	
	3.1 mg/m ³	3.1 mg/m ³	3.1 mg/m ³	Ljudi inhalacijski	Kratkotrajni, lokalni učinci	
	1.55 mg/m ³	1.55 mg/m ³	1.55 mg/m ³	Ljudi inhalacijski	Dugotrajni, lokalni učinci	
	1.55 mg/m ³	1.55 mg/m ³	1.55 mg/m ³	Ljudi inhalacijski	Dugotrajni, sistemski učinci	
			0.26 mg/kg	Ljudi oralno	Dugotrajni, sistemski učinci	

8.2. Nadzor nad izloženosti

Osigurati odgovarajuću ventilaciju. Kad je to razumno moguće, to se može postići upotrebom rezervne ventilacije i dobre opće aspiracije.

Zaštita očiju:

Čaše sa bočnom zaštitom (EN 166).

Zaštita kože:

Upotrebljavati odjeću prikladnu za potpunu zaštitu kože u skladu s aktivnošću i izloženosti (EN 14605/EN 13982), npr. radne kombinezone, pregače, sigurnosnu obuću, prikladnu odjeću.

Zaštita za ruke:

Ne postoji materijal ili kombinacija materijala za rukavice koji bi mogli jamčiti neograničenu otpornost na bilo koji kemijski proizvod ili kombinaciju proizvoda.

Ako je riječ o duljem ili ponavljanom rukovanju, koristite se rukavicama otpornim na kemijske proizvode.

Prikladne rukavice tipa (EN 374/EN 16523); PVC (polivinilklorid): debljina > = 0,4 mm; vrijeme prodiranja > = 480 min.

Izbor prikladnih rukavica ne ovisi samo o materijalu, nego i o drugim karakteristikama kvalitete koje se razlikuju od proizvođača do proizvođača, i o načinima i vremenu upotrebe smjese.

Zaštita pri disanju:

Ako su radnici izloženi koncentracijama višima od granice izloženosti, moraju upotrebljavati odgovarajuće certificirane respiratore.

Kombinirana filtrirajuća naprava (EN 14387).

Kontrola izlaganja u okolišu:

Vidi točku 6.2

ODJELJAK 9.: Fizikalna i kemijska svojstva

9.1. Informacije o osnovnim fizikalnim i kemijskim svojstvima

Izgled: tekuće
Boja: žuto
Miris: karakterističan
Točka topljenja/smrzavanja: N.D.
Početna točka ključanja i vrijeme ključanja: N.D.
Zapaljivost: Ne primjenjuje se.
Gornja/donja granica zapaljivosti ili eksplozije: N.D.
Plamište: > 60°C / 93°C
Temperatura samozapaljenja: N.D.
Temperatura raspadanja: N.D.
pH: $\geq 11.50 \leq 12.50$ (Interna metoda)
Kinematička viskoznost: Ne primjenjuje se.
Gustoća: 1,19 kg/l (Interna metoda)
Gustoća para: N.D.
Tlak pare: N.D.
Topljivost u vodi: može se miješati u svim izvješćima
Topljivost u ulje: Ne primjenjuje se.
Koeficijent raspodjele (n-okanol/voda): Ne primjenjuje se.

Svojstva čestica:

Veličina čestica: Ne primjenjuje se.

9.2. Ostale informacije

Vodljivost: N.D.
Eksplozivne osobine: Ne primjenjuje se. (Interna evaluacija)
Metal corrosion rate: 7.00
Osobine oksidiranja: Ne primjenjuje se. (Interna evaluacija)
Brzina isparavanja: Ne primjenjuje se.

ODJELJAK 10.: Stabilnost i reaktivnost

10.1. Reaktivnost

Stabilan u normalnim uvjetima

10.2. Kemijska stabilnost

Stabilan u normalnim uvjetima

10.3. Mogućnost opasnih reakcija

Može stvarati zapaljive plinove u kontaktu s halogeniranim organskim tvarima i elementarnim metalima.

10.4. Uvjeti koje treba izbjegavati

Čuvati odvojeno od izvora topline.
Izbjegavajte kontakt s kiselinama i nekim metalima (aluminij i njegove legure, cink).

10.5. Inkompatibilni materijali

Vidi točku 10.3

10.6. Opasni proizvodi raspadanja

Pri odgovarajućem skladištenju i rukovanju ne razvijaju se opasni proizvodi raspadanja.
Vidi točku 5.2

ODJELJAK 11.: Toksikološke informacije

11.1. Informacije o razredima opasnosti kako su definirani u Uredbi (EZ) br. 1272/2008

Podaci o toksičnosti proizvoda:

a) akutna toksičnost	Nije kategorizirano Na temelju dostupnih podataka kriteriji za razvrstavanje nisu ispunjeni.
b) kožno nagrizanje/nadraživanje	Proizvod je razvrstan kao: Skin Corr. 1B(H314)
c) teške očne ozljede/teško očno nadraživanje	Proizvod je razvrstan kao: Eye Dam. 1(H318)
d) izazivanje kožne ili dišne preosjetljivosti	Nije kategorizirano Na temelju dostupnih podataka kriteriji za razvrstavanje nisu ispunjeni.

e) mutagenost zametnih stanica	Nije kategorizirano Na temelju dostupnih podataka kriteriji za razvrstavanje nisu ispunjeni.
f) kancerogenost	Nije kategorizirano Na temelju dostupnih podataka kriteriji za razvrstavanje nisu ispunjeni.
g) reproduktivna toksičnost	Nije kategorizirano Na temelju dostupnih podataka kriteriji za razvrstavanje nisu ispunjeni.
h) Specifična toksičnost za ciljne organe (STOT) jednokratno izlaganje	Nije kategorizirano Na temelju dostupnih podataka kriteriji za razvrstavanje nisu ispunjeni.
i) Specifična toksičnost za ciljne organe (STOT) opetovano izlaganje	Nije kategorizirano Na temelju dostupnih podataka kriteriji za razvrstavanje nisu ispunjeni.
j) opasnost u slučaju udisanja	Nije kategorizirano Na temelju dostupnih podataka kriteriji za razvrstavanje nisu ispunjeni.

Podaci o toksičnosti glavnih sastojaka u proizvodu:

natrijev hipoklorit, otopina 14% aktivnog Cl	a) akutna toksičnost	LD50 Oralno Štakor 1100 mg/kg LD50 Koža Kunić 20000 mg/kg LC50 Udisanje Štakor 10500 mg/m ³ 1h
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11.2. Informacije o drugim opasnostima

Svojstva endokrine disrupcije:

Bez drugih endokrinih disruptora prisutnih u koncentraciji $\geq 0,1\%$

ODJELJAK 12.: Ekološke informacije

Primjeniti dobre radne postupke da se produkt ne oslobađa u okoliš.

12.1. Toksičnost

Eko-Toksikološke informacije:

Otrovno za vodeni okoliš s dugotrajnim učincima.

Popis eko-toksikoloških svojstava proizvoda

Proizvod je razvrstan kao: Aquatic Acute 1(H400), Aquatic Chronic 2(H411)

Popis sastojaka sa eko-toksikološkim svojstvima

Sastojak	Ident. Broj.	Ekotoksik. Informacije
natrijev hipoklorit, otopina 14% aktivnog Cl	CAS: 7681-52-9 - EINECS: 231-668-3 - INDEX: 017-011-00-1	a) Akutna otrovnost na vodene organizme : LC50 Ribe 0.032 mg/l 96h a) Akutna otrovnost na vodene organizme : EC50 Daphnia 0.165 mg/l 48h a) Akutna otrovnost na vodene organizme : EC50 Algae 0.05 mg/l 72h b) Hronična otrovnost na vodene organizme : NOEC Ribe 0.04 mg/l 28d b) Hronična otrovnost na vodene organizme : NOEC Daphnia 0.007 mg/l - 14d b) Hronična otrovnost na vodene organizme : NOEC Algae 0.02 mg/l 96h

12.2. Postojanost i razgradivost

Sastojak Postojanost/razgradivost:

natrijev hipoklorit, otopina 14% aktivnog Cl Nepostojan i biorazgradiv

12.3. Bioakumulacijski potencijal

Ne primjenjuje se.

12.4. Pokretljivost u tlu

Ne primjenjuje se.

12.5. Rezultati procjene svojstava PBT i vPvB

Prema dostupnim podacima proizvod ne sadrži
PBT/vPvB u postotku većem $\geq 0.1\%$.

12.6. Svojstva endokrine disrupcije

Bez drugih endokrinih disruptora prisutnih u koncentraciji $> = 0,1 \%$

12.7. Ostali štetni učinci

Ne primjenjuje se.

ODJELJAK 13.: Zbrinjavanje

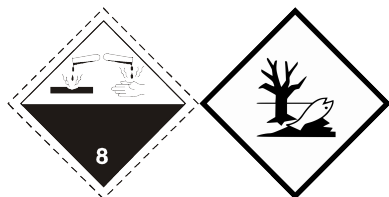
13.1. Metode obrade otpada

Regenerirati ako je moguće. Poslati ovlaštenim postrojenjima za odlaganje ili na spaljivanje pod kontroliranim uvjetima. Pri tome se pridržavati vrijedećih lokalnih i državnih regulativa.

Ne dopustiti prodor u kanalizaciju ili vodene tokove.

Zbrinite kontejnera onečišćenih proizvoda u skladu s lokalnim ili nacionalnim zakonskim odredbama.

ODJELJAK 14.: Informacije o prijevozu



14.1. UN broj ili identifikacijski broj

1791

14.2. Ispravno otpremno ime prema UN-u

ADR-Naziv za otpremu: HIPOKLORIT, OTOPINA

IATA-Tehnički naziv: HYPOCHLORITE SOLUTION

IMDG-Tehnički naziv: HYPOCHLORITE SOLUTION

14.3. Razred(i) opasnosti pri prijevozu

ADR-Razred: 8

IATA-Razred: 8

IMDG-Razred: 8

14.4. Skupina pakiranja

ADR-Grupa pakiranja: II

IATA-Grupa pakiranja: II

IMDG-Grupa pakiranja: II

14.5. Opasnosti za okoliš

Morski polutant: Da

Zagađivači okoliša: Da

IMDG-EMS: F-A, S-B

14.6. Posebne mjere opreza za korisnika

Ceste i Željeznica (ADR-RID):

ADR-Označavanje: 8

ADR - Identifikacijski broj opasnosti: 80

ADR-Posebne odredbe: 521

ADR ograničenja prijevoza u tunelu:

Zrak (IATA):

IATA-Putnički zrakoplov: 851

IATA-Teretni zrakoplov: 855

IATA-Označavanje: 8

IATA-Sporedni opasnosti: -

IATA-Erg: 8L

IATA-Posebne odredbe: A3 A803

More (IMDG):

IMDG-Šifra utovara u brod: Category B

IMDG-Napomena za utovar u brod: SG20 SGG8

IMDG-Sporedni opasnosti: -

IMDG-Posebne odredbe: 274 900

14.7. Prijevoz morem u razlišenom stanju u skladu s instrumentima IMO-a

Ne primjenjuje se.

ODJELJAK 15.: Informacije o propisima

15.1. Propisi u području sigurnosti, zdravlja i okoliša/posebno zakonodavstvo za tvar ili smjesu

Direktiva 98/24/EC (Rizici koji nastaju od kemijskih agenasa na radu)

Direktiva 2000/39/EC (Granična vrijednost profesionalne izloženosti)

Direktiva 2010/75/EU

Uredba (EC) br. 1907/2006 (REACH)

Uredba (EC) br. 1272/2008 (CLP)

Uredba (EC) br. 790/2009 (ATP 1 CLP) i (EZ) br. 758/2013

Uredba (EZ) br. 2020/878

Uredba (EZ) br. 286/2011 (ATP 2 CLP)

Uredba (EZ) br. 618/2012 (ATP 3 CLP)

Uredba (EZ) br. 487/2013 (ATP 4 CLP)

Uredba (EZ) br. 944/2013 (ATP 5 CLP)

Uredba (EZ) br. 605/2014 (ATP 6 CLP)

Uredba (EZ) br. 2015/1221 (ATP 7 CLP)

Uredba (EZ) br. 2016/918 (ATP 8 CLP)

Uredba (EZ) br. 2016/1179 (ATP 9 CLP)

Uredba (EZ) br. 2017/776 (ATP 10 CLP)

Uredba (EZ) br. 2018/669 (ATP 11 CLP)

Uredba (EZ) br. 2018/1480 (ATP 13 CLP)

Uredba (EZ) br. 2019/521 (ATP 12 CLP)

Uredba (EZ) br. 2020/217 (ATP 14 CLP)

Uredba (EZ) br. 2020/1182 (ATP 15 CLP)

Uredba (EZ) br. 2021/643 (ATP 16 CLP)

Uredba (EZ) br. 2021/849 (ATP 17 CLP)

Uredba (EZ) br. 2022/692 (ATP 18 CLP)

Ograničenja u vezi s produktom ili sadržajnim tvarima u skladu s Prilogom XVII Uredbe (EZ-a) 1907/2006 (REACH) i naknadne izmjene:

Ograničenja koja se odnose na proizvod: 3

Ograničenja koja se odnose na sadržane tvari: 75

Odredbe prema direktivi 2012/18/EU (Seveso III)

Kategorija Seveso III prema dijelu 1. Priloga 1.	Donje granične količine opasnih tvari (u tonama) - male količine	Donje granične količine opasnih tvari (u tonama) - velike količine
proizvod pripada kategoriji: E1	100	200
proizvod pripada kategoriji: E2	200	500

Uredba (EU) br. 649/2012 (Uredba PIC)

Nijedna tvar nije navedena

Njemačka klasifikacija opasnosti za vodu.

2: Hazard to waters

SVHC tvari:

Prema dostupnim podacima proizvod ne sadrži SVHC u postotku većem $\geq 0.1\%$.

Napomene o sastojcima u skladu s Ured. (EZ) br. 648/2004: < 5 % neionskih površinski aktivnih tvari, fosfonata; između 5 i 15 % izbjeljivača na bazi klora.

15.2. Procjena kemijske sigurnosti

Procjena kemijske sigurnosti nije provedena za smjesu

ODJELJAK 16.: Ostale informacije

Šifra	Opis
EUH031	U dodiru s kiselinama oslobađa otrovni plin.
H290	Može nagrizati metale.
H302	Štetno ako se proguta.
H314	Uzrokuje teške opekline kože i ozljede oka.
H315	Nadražuje kožu.
H318	Uzrokuje teške ozljede oka.

H400	Vrlo otrovno za vodeni okoliš.	
H411	Otrovno za vodeni okoliš s dugotrajnim učincima.	
Šifra	Razred opasnosti i kategorija opasnosti	Opis
2.16/1	Met. Corr. 1	Tvar ili smjesa nagrizajuća za metale, kategorija 1
3.1/4/Oral	Acute Tox. 4	Akutna toksičnost (gutanje), kategorija 4
3.2/1B	Skin Corr. 1B	Nagrizajuće za kožu, kategorija 1B
3.2/2	Skin Irrit. 2	Nadražujuće za kožu, kategorija 2
3.3/1	Eye Dam. 1	Teška ozljeda oka, kategorija 1
4.1/A1	Aquatic Acute 1	Akutnu opasnost za organizme koji žive u vodi, kategorija 1
4.1/C2	Aquatic Chronic 2	Kroničnu (dugoročnu) opasnost za organizme koji žive u vodi, kategorija 2

Razvrstavanje i postupak razvrstavanja za smjese sukladno Uredbi (EZ) br. 1272/2008 (CLP):

Razvrstavanje prema Uredbi (EZ) br. 1272/2008 Postupak razvrstavanja

2.16/1	Na temelju rezultata ispitivanja
3.2/1B	Računska metoda
3.3/1	Računska metoda
4.1/A1	Računska metoda
4.1/C2	Računska metoda

Ovaj dokument izradila je tehnički kompetentna osoba za SDS, te koja je prikladno za to osposobljena.

Glavni bibliografski izvori:

ECDIN – Informacijska mreža za ekološke podatke za kemikalije – Zajednički istraživački centar, Komisija Europskih zajednica
 SAX's OPASNE OSOBINE INDUSTRIJSKIH TVARI- Osmo izdanje - Van Nostrand Reinold
 Sigurnosno-tehnički listovi dobavljača sirovina.
 CCNL - Apendiks 1

Ovdje objavljuje informacije se temelje na našem znanju u vrijeme gore navedenog datuma. Odnose se samo na navedene proizvode i ne predstavlja garanciju neke određene kvalitete.

Obaveza je korisnika da utvrdi da je ova informacija cjelovita i da odgovara specifičnoj upotrebi.

Ovaj MSDS poništava i zamjenjuje sva predhodna izdanja.

Legenda kratica i akronima upotrebljenih u sigurnosno-tehničkom listu:

ACGIH: Američka konferencija vladinih specijalista za industrijsku higijenu
 ADR: Europski sporazum o međunarodnom cestovnom prijevozu opasnih tvari.
 ATE: Procjena akutne toksičnosti
 ATEmix: Procijenjena vrijednost akutne toksičnosti (Mješavine)
 BEI: Indeks biološke izloženosti
 CAS: CAS registarski broj (Američko kemijsko društvo)
 CAV: Centar za otrove
 CE: Europska zajednica
 CLP: Razvrstavanje, označavanje, pakiranje.
 CMR: Karcinogeno, Mutageno i Reprotoksično
 COV: Hlapivi organski spoj
 CSA: Procjena kemijske sigurnosti
 CSR: Izvješće o kemijskoj sigurnosti
 DNEL: Izvedena razina bez učinka.
 EC50: Pulu maksimalna efektivna koncentracija
 ECHA: Europska agencija za kemijske proizvode
 EINECS: Europski popis postojećih trgovačkih kemijskih tvari.
 ES: Scenario izloženosti
 GefStoffVO: Propis o opasnim tvarima, Njemačka.
 GHS: Globalno harmonizirani sustav razvrstavanja i označavanja kemikalija
 IARC: Međunarodna agencija za istraživanja o karcinomu
 IATA: Međunarodna udruga za zračni prijevoz.
 IC50: Pulu maksimalna koncentracija inhibitora
 IMDG: Međunarodni pomorski kodeks opasnog tereta.
 LC50: Smrtna koncentracija u 50% slučajeva ispitivane populacije.
 LD50: Smrtna doza u 50% slučajeva ispitivane populacije.
 LDLo: Niska smrtonosna doza
 N.A.: Nije primjenjivo
 N/A: Nije primjenjivo

N/D: Nije definirano/Nije dostupno
N.D.: Nije dostupno
NIOSH: Državni institut za zaštitu na radu
NOAEL: Razina bez uočenih štetnih učinaka
OSHA: Upravljanje zaštitom na radu
PBT: Persistentno, bioakumulativno i toksično
PGK: Packaging Instruction
PNEC: Predviđena koncentracija bez učinka.
PSG: Putnici
RID: Propis o međunarodnom prijevozu opasnih tvari željeznicom
STEL: Granica kratkotrajne izloženosti.
STOT: Toksičnost za ciljani organ.
TLV: Granična vrijednost praga.
TLV-TWA: Granična vrijednost praga za vremenski ponderirani prosjek. (ACGIH standard)
vPvB: Vrlo persistentno, vrlo bioakumulativno
WGK: Njemačka klasifikacija opasnosti za vodu.

SODIUM HYPOCHLORITE

Substance identification

Chemical Name: SODIUM HYPOCHLORITE

CAS number: 7681-52-9

Date - Version: April 2019

PROFESSIONAL USE AS A CLEANING AGENT

SECTION 1: TITLE OF THE EXPOSURE SCENARIO

Title

Professional use as a cleaning agent

List of use descriptors;

SU22: Professional uses: administration, education, entertainment, services, craftsmen

PC35 Washing and cleaning products (including solvent-based ones)

ERC

ERC8a Wide dispersive indoor use of processing aids in open systems

ERC8b Wide dispersive indoor use of reactive substances in open systems

ERC8d Wide dispersive outdoor use of processing aids in open systems

ERC8e Wide dispersive outdoor use of reactive substances in open systems

PROC

PROC5 Mixing in batch processes (multistage and/or significant contact) (PROC5)

PROC9 Transfer of chemicals into small containers (dedicated filling line)

PROC10 Application with rollers or brushes

PROC11 Professional spraying

PROC13 Treatment of articles by dipping and pouring

PROC15 Use as a laboratory reagent

SECTION 2: OPERATING CONDITIONS AND RISK MANAGEMENT MEASURES

2.1. ENVIRONMENTAL EXPOSURE CONTROL - Exposure scenarios determining environmental exposure for ERC8a, 8b, 8d, 8e

Product features

Substance with a unique structure. Not hydrophobic. Readily biodegradable: Concentration < 5%.

European tonnage

250-450,000 tons per year of sodium hypochlorite solution.

Frequency and duration of use

Continuous release. Issue days: 360 days/year

Environmental factors not influenced by risk management

Fresh surface water dilution factor 10.

Sea water dilution factor 100.

Other operating conditions affecting environmental exposure

Avoid release to environment (surface water or soil) or wastewater. However, sodium hypochlorite disappears rapidly in all the scenarios presented, due to rapid reduction in the receiving body or in the sewer system. No release to the environment is therefore expected. In the worst case, the free available chlorine measured as total residual chlorine (TRC) is expected to be less than 1.0E-13 mg/l.

Technical conditions and measures at process level to prevent release

The practices used may vary from site to site and must comply with the Biocides Directive 98/8/EC.

Local technical conditions and measures on site to reduce or limit emissions to air and release to soil.

NaClO must be completely reduced to sodium chloride during the process to avoid critical releases to the environment.

Organizational measures to prevent/limit releases from the site

Prevent releases into the environment in accordance with legislative provisions.

Conditions and measures related to industrial or municipal wastewater plant

Wastewater treatment is required to remove all residual organic compounds and unreacted free chlorine.

Conditions and measures related to the external treatment of waste for disposal

External treatment and disposal of waste should comply with applicable local and/or national regulations.

2.2. WORKER EXPOSURE CONTROL - Exposure scenarios determining environmental exposure for PROC 5, 9, 10, 11, 13, 15

GENERAL CONDITIONS APPLICABLE TO ALL ACTIVITIES

G12 - Covers percentage substance in the product up to 25 % (unless otherwise stated).

G2 - Covers daily exposures up to 8 hours (unless otherwise stated).

OC8 - Indoor

Risk management measures and measures related to personal protection, hygiene and health evaluation: see GENERAL RISK MANAGEMENT MEASURES, appendix 1, at the end of this document.

SPECIFIC CONDITIONS APPLICABLE TO SPECIFIC ACTIVITIES

Scenarios:

PROC5: Mixing in batch processes (multistage and/or significant contact) (PROC5)

Duration of use: no specific condition

Substance concentration: no specific condition

Risk management measures: Provide a good standard of natural ventilation. Natural ventilation is that from doors, windows, etc. Controlled ventilation means that air is supplied and exchanged by fans. Low containment process.

PROC9 Transfer of chemicals into small containers (dedicated filling line)

Duration of use: no specific condition

Substance concentration: no specific condition

Risk management measures: Provide a good standard of natural ventilation. Natural ventilation is that from doors, windows, etc. Controlled ventilation means that air is supplied and exchanged by fans. Low containment process.

PROC10 Application with rollers or brushes

Duration of use: OC28 - Avoid carrying out activities involving exposure for more than 4 hours.

Substance concentration: no specific condition

Risk management measures: Provide a good standard of natural ventilation. Natural ventilation is that from doors, windows, etc. Controlled ventilation means that air is supplied and exchanged by fans. Low containment process.

PROC11 Professional spraying

Duration of use: OC28 - Avoid carrying out activities involving exposure for more than 1 hour.

Substance concentration: no specific condition

Risk management measures: Provide a good standard of natural ventilation. Natural ventilation is that from doors, windows, etc. Controlled ventilation means that air is supplied and exchanged by fans. Low containment process.

PROC13 Treatment of articles by dipping and pouring

Duration of use: OC28 - Avoid carrying out activities involving exposure for more than 4 hours.

Substance concentration: no specific condition

Risk management measures: Provide a good standard of natural ventilation. Natural ventilation is that from doors, windows, etc. Controlled ventilation means that air is supplied and exchanged by fans. Low containment process.

PROC15 Use as a laboratory reagent

Duration of use: no specific condition

Substance concentration: no specific condition

Risk management measures: Provide a good standard of natural ventilation. Natural ventilation is that from doors, windows, etc. Controlled ventilation means that air is supplied and exchanged by fans.

SECTION 3: EXPOSURE ESTIMATIONS AND REFERENCE TO ITS ORIGIN

3.1. Environment

EE8 - Qualitative approach used to conclude safe use (see appendix 2 at the end of this document).

Predicted environmental concentrations - PECs

In accordance with the above qualitative assessment, the worst exposure concentration used as a PEC in a wastewater treatment plant is 1.0E-13 mg/l. PECs for other compartments are not applicable as sodium hypochlorite is rapidly destroyed when it comes into contact with organic and inorganic substances; it is also a non-volatile substance.

Indirect exposure of persons through the environment (oral route)

The hypochlorite does not reach the environment through the wastewater treatment system as the rapid transformation of the applied hypochlorite (understood as free available chlorine) in the treatment plant ensures there is no possible human exposure to the hypochlorite. In recreational areas located near hypochlorite-treated wastewater discharge points, the potential for exposure to hypochlorite from wastewater treatment is again negligible as there is no discharge of unreacted hypochlorite.

Given the chemical-physical characteristics of hypochlorite, no exposure through the food chain is expected to occur. No indirect exposure to hypochlorite via the environment is therefore expected.

3.2. Human health

The Advanced Reach Tool 1 model was used. (see in detail the inputs for the exposure calculation in Appendix 3, at the end of this document).

Route of exposure	PROC	Concentration of sodium hypochlorite	Risk Characterization Ratio (RCR)		
		Value	Inhalation	Dermal	Combined
Long-term exposure, local, inhalation	PROC5	1.00 mg/m ³	0.65	Not applicable	Not applicable
Long-term exposure, local, inhalation	PROC9	1.10 mg/m ³	0.71	Not applicable	Not applicable
Long-term exposure, local, inhalation	PROC10	1.20 mg/m ³	0.77	Not applicable	Not applicable
Long-term exposure, local, inhalation	PROC11	1.00 mg/m ³	0.65	Not applicable	Not applicable
Long-term exposure, local, inhalation	PROC13	1.20 mg/m ³	0.77	Not applicable	Not applicable
Long-term exposure, local, inhalation	PROC15	0.85mg/m ³	0.55	Not applicable	Not applicable

SECTION 4: GUIDANCE FOR END USERS TO ASSESS WHETHER THEY COMPLY WITH THE EXPOSURE SCENARIO

Guidance is based on assumed operating conditions which may not be applicable to all sites. Thus, scaling may be necessary to define appropriate site-specific risk management measures. If scaling reveals a condition of unsafe use (i.e., RCRs > 1), additional risk management measures or a site-specific CSA (chemical safety assessment) is required.

APPENDIX 1 - Qualitative evaluation - Human health

Qualitative assessment of exposure to a substance classified as R34 (Causes burns) and R37 (Irritating to respiratory system), or H314 (Causes severe skin burns and eye damage) and H335 (May cause respiratory irritation).

In the absence of dose-response data with respect to corrosion (R34 or H314) or irritation (R37 or H335) of the respiratory system, in accordance with R8 (R.8.6), a qualitative approach is adopted to assess exposure to a corrosive substance. Exposure must therefore be minimised using the appropriate general risk management measures given below (ECHA Technical Guidance Part E, Table E.3-1). When these risk management measures and operating conditions are applied, the risk of respiratory system exposure to corrosive and irritant substances is controlled.

General risk management measures for R34 and R37 or H314 and H335 classified substances (ECHA Technical Guidance Part E - Table E3-1)

Risk management measures and operational conditions

GENERAL

adequate containment.
Minimize the number of operators involved.
Process segregation.
Effective extraction of the contaminant.
Good standard of general ventilation.
Minimization of manual phases.
Avoid contact with contaminated tools and objects.
Regular cleaning of equipment and working air.
Onsite management/supervision to check that the risk management measures are being used and followed correctly.
Staff training on best practices.
Good standard of personal hygiene.

PERSONAL PROTECTIVE EQUIPMENT

Gloves suitable for the substance/application.
Covering of the skin made with an adequate material against the possibility of contact with substances.
Respirator appropriate for substance/application.
Optional face shield.
Eye protection.

APPENDIX 2 - Qualitative evaluation - Environment

Water and sediment compartment

Hypochlorite emissions to the environment from production processes are minor. The free available chlorine (FAC) in the effluent is generally measured as total residual chlorine (TRC), but it is not possible to distinguish how much refers to hypochlorite and how much to other oxidising species in the same effluent. TRC is the sum of the free available chlorine (HOCl, FAC) and combined available chlorine (RH₂Cl, CAC). For sites reporting TRC levels in the effluent purely as information on the dilution factor set by the receiving body, initial local PEC values of from < 0.000006 to 0.07 mg/l have been measured. TRC values were not, however, considered applicable due to the immediate subsequent reaction with the oxidisable material present in the receiving waters, whereas any FAC residue is immediately eliminated in the receiving waters, with decay rates increasing as the discharged concentrations increase. The measured TRC values are not, therefore, directly applicable for hypochlorite exposure assessment. Rather than using the measured TRC values, FAC values were instead used to determine the PECs (predicted environmental concentrations).

In practice, hypochlorous/hypochlorite acid (below 10-35 mg/L as FAC, Vandepitte and Schowanek, 2007) do not remain in the sewer system for more than one hour after their addition. No volatilisation of the hypochlorous acid/hypochlorite is expected during sewage treatment. The FAC concentration at the end of the sewer system is estimated to be negligible with, as a worst case, a final PEC value of 1.0E-13 mg/L (Vandepitte and Schowanek, 2007). (NB: these estimated concentrations have a large margin of uncertainty but are still well below the aquatic PNEC). Although the decay of hypochlorite in rivers and the sea is lower than in the sewer system, the PEC values derived from the FAC values were considered not to differ significantly from the estimated worst case.

Since hypochlorite is rapidly destroyed in contact with organic and inorganic materials, exposures in sediments are not expected.

Terrestrial compartment (including secondary poisoning)

Possible routes of soil exposure to HOCl are through contaminated sludge or by direct application of treated water. As can be calculated with Vandepitte and Schowanek's model (for more information, refer to the European evaluation of sodium hypochlorite, 1997), it is evident that the concentrations of available HOCl in domestic sewage discharges are completely destroyed in the sewer system before reaching activated sludge treatment. HOCl is also a highly soluble molecule and is not likely to be absorbed on activated sludge. There is therefore no evidence that HOCl has the potential to contaminate activated sludge. The contamination of soils with HOCl-polluted sludge can therefore be excluded. It is also thought that secondary poisoning is not possible, as hypochlorite is quickly destroyed on contact with organic and inorganic material.

Atmospheric compartment

Hypochlorite solutions are not volatile, therefore there is no potential for airborne dispersion. Moreover, methods for determining the effects of chemicals deriving from atmospheric contamination have not yet been well developed, with the exception of inhalation studies in mammals. The methodology used to assess the hazard (and for subsequent risk characterisation) from chemicals in water and soil cannot therefore be applied to the atmosphere (ECHA CSA Part B, 2008).

APPENDIX 3 - ART Advanced Reach Tool level 2 - Values entered for the evaluation of inhalation

Contributing scenario: PROC1 industrial

Exposure duration (min): 480
Product type: liquid
Process temperature: 15-25°C
Vapor pressure at process temperature: 2500Pa
%: <25
Near field CV / Far CL: CL
Activity class: Activities with open containers
Activity subclass: Activities with open containers: open area <0.1m²
Primary control measures: none
Secondary control measures: High level of containment
Segregation: none
Personal protection: none
Environment cleaning: Yes
Indoor/Outdoor: Inside
Room size: Every type
Ventilation Rate: 3 refills per hour

Contributing scenario: PROC2 industrial

Exposure duration (min): 420
Product type: liquid
Process temperature: 15-25°C
Vapor pressure at process temperature: 2500Pa
%: <25
Near field CV / Far CL: CL
Activity class: Activities with open containers
Activity subclass: Activities with open containers: open area <0.1m²
Primary control measures: none
Secondary control measures: Low level of containment
Segregation: none
Personal protection: none
Environment cleaning: Yes
Indoor/Outdoor: Inside
Room size: Every type
Ventilation Rate: 3 refills per hour

Contributing scenario: PROC2 industrial

Activity number: 2
Exposure duration (min): 60
Product type: liquid
Process temperature: 15-25°C
Vapor pressure at process temperature: 2500Pa
%: <25
Near field CV / Far CL: CV
Activity class: Liquid product transfer 1-10 l/min
Activity subclass: Falling liquids/handling reducing product/adjacent air contact
Primary control measures: Localized ventilation/hood
Secondary control measures: Low level of containment
Environment cleaning: Yes
Indoor/Outdoor: Inside
Room size: Every type
Ventilation Rate: 3 refills per hour

Contributing scenario: PROC3 industrial

Exposure duration (min): 420
Product type: liquid
Process temperature: 15-25°C
Vapor pressure at process temperature: 2500Pa
%: <25
Near field CV / Far CL: CL
Activity class: Activities with open containers
Activity subclass: Activities with open containers: open area <0.1m²
Primary control measures: none
Secondary control measures: Low level of containment
Segregation: none
Personal protection: none
Environment cleaning: Yes
Indoor/Outdoor: Inside
Room size: Every type
Ventilation Rate: 3 refills per hour

Contributing scenario: PROC3 industrial

Exposure duration (min): 60
Product type: liquid
Process temperature: 15-25°C
Vapor pressure at process temperature: 2500Pa
%: <25
Near field CV / Far CL: CV
Activity class: Liquid product transfer 1-10 l/min
Activity subclass: Falling liquids/handling reducing product/adjacent air contact
Primary control measures: Localized ventilation/hood
Secondary control measures: Low level of containment
Environment cleaning: Yes
Indoor/Outdoor: Inside
Room size: Every type
Ventilation Rate: 3 refills per hour

Contributing scenario: PROC4 industrial

Exposure duration (min): 360
Product type: liquid
Process temperature: 15-25°C
Vapor pressure at process temperature: 2500Pa
%: <25
Near field CV / Far CL: CL
Activity class: Activities with open containers
Activity subclass: Activities with open containers: open area <0.1m²
Primary control measures: none
Secondary control measures: Low level of containment
Environment cleaning: Yes
Indoor/Outdoor: Inside
Room size: Every type
Ventilation Rate: 3 refills per hour

Contributing scenario: PROC4 industrial

Exposure duration (min): 120
Product type: liquid
Process temperature: 15-25°C
Vapor pressure at process temperature: 2500Pa
%: <25
Near field CV / Far CL: CV
Activity class: Liquid product transfer 1-10 l/min
Activity subclass: Falling liquids/handling reducing product/adjacent air contact
Primary control measures: Localized ventilation/hood
Secondary control measures: Low level of containment
Environment cleaning: Yes
Indoor/Outdoor: Inside
Room size: Every type
Ventilation Rate: 3 refills per hour

Contributing scenario: PROC5 industrial

Exposure duration (min): 90
Product type: liquid
Process temperature: 15-25°C
Vapor pressure at process temperature: 2500Pa
%: <25
Near field CV / Far CL: CL
Activity class: Activities with open containers
Activity subclass: Activities with open containers: open area <0.3m²
Primary control measures: none
Secondary control measures: low level of containment
Environment cleaning: Yes
Indoor/Outdoor: Inside
Room size: Every type
Ventilation Rate: 3 refills per hour

Contributing scenario: PROC5 industrial

Exposure duration (min): 390
Product type: liquid
Process temperature: 15-25°C
Vapor pressure at process temperature: 2500Pa
%: <25
Near field CV / Far CL: CV
Activity class: Liquid product transfer 1-10 l/min
Activity subclass: Falling liquids/handling reducing product/adjacent air contact
Primary control measures: Localized ventilation/hood
Secondary control measures: Low level of containment
Environment cleaning: Yes
Indoor/Outdoor: Inside
Room size: Every type
Ventilation Rate: 3 refills per hour

Contributing scenario: PROC8a industrial

Exposure duration (min): 360
Product type: liquid
Process temperature: 15-25°C
Vapor pressure at process temperature: 2500Pa
%: <25
Near field CV / Far CL: CV
Activity class: Liquid product transfer <100 l/min
Activity subclass: Falling liquids/handling reducing product/adjacent air contact
Primary control measures: Localized ventilation/hood
Secondary control measures: Low level of containment
Environment cleaning: Yes
Indoor/Outdoor: Inside
Room size: Every type
Ventilation Rate: 3 refills per hour

Contributing scenario: PROC8b industrial

Exposure duration (min): 360
Product type: liquid
Process temperature: 15-25°C
Vapor pressure at process temperature: 2500Pa
%: <25
Near field CV / Far CL: CV
Activity class: Liquid product transfer <100 l/min
Activity subclass: Falling liquids/handling reducing product/adjacent air contact
Primary control measures: Localized ventilation/hood
Secondary control measures: Low level of containment
Environment cleaning: Yes
Indoor/Outdoor: Inside
Room size: Every type
Ventilation Rate: 3 refills per hour

Contributing scenario: PROC9 industrial

Exposure duration (min): 480
Product type: liquid
Process temperature: 15-25°C
Vapor pressure at process temperature: 2500Pa
%: <25
Near field CV / Far CL: CV
Activity class: Liquid product transfer <100 l/min
Activity subclass: Falling liquids/handling reducing product/adjacent air contact
Primary control measures: Localized ventilation/hood
Secondary control measures: Low level of containment
Environment cleaning: Yes
Indoor/Outdoor: Inside
Room size: Every type
Ventilation Rate: 1 change per hour

Contributing scenario: PROC7 industrial

Exposure duration (min): 240
Product type: liquid
Process temperature: 15-25°C
Vapor pressure at process temperature: 2500Pa
%: <25
Near field CV / Far CL: CL
Activity class: Spray application of liquids
Activity subclass: Application in every direction; use of slightly compressed air: speed < 3 m²/min
Primary control measures: Localized ventilation/hood
Secondary control measures: medium level of containment
Segregation: none
Personal protection: complete with ventilation
Environment cleaning: Yes
Indoor/Outdoor: Inside
Room size: Every type
Ventilation Rate: 1 change per hour

Contributing scenario: PROC10 industrial

Exposure duration (min): 480
Product type: liquid
Process temperature: 15-25°C
Vapor pressure at process temperature: 2500Pa
%: <25
Near field CV / Far CL: CV
Activity class: Diffusion of liquids
Activity subclass: Localized ventilation/hood
Primary control measures: Localized ventilation/hood
Secondary control measures: medium level of containment
Environment cleaning: Yes
Indoor/Outdoor: Inside
Room size: Every type
Ventilation Rate: 1 change per hour

Contributing scenario: PROC13 industrial

Exposure duration (min): 480
Product type: liquid
Process temperature: 15-25°C
Vapor pressure at process temperature: 2500Pa
%: <25
Near field CV / Far CL: CL
Activity class: Activities with open containers
Activity subclass: Activities with open containers: surface area > 3m²
Primary control measures: Localized ventilation/hood
Secondary control measures: medium level of containment
Segregation: none
Personal protection: partial with ventilation
Environment cleaning: Yes
Indoor/Outdoor: Inside
Room size: Every type
Ventilation Rate: 1 change per hour

Contributing scenario: PROC14 industrial

Exposure duration (min): 480
Product type: liquid
Process temperature: 15-25°C
Vapor pressure at process temperature: 2500Pa
%: <25
Near field CV / Far CL: CL
Activity class: Handling of contaminated objects
Activity subclass: Contamination >90%; area 1-3m²
Primary control measures: Localized ventilation/hood
Secondary control measures: medium level of containment
Segregation: none
Personal protection: none
Environment cleaning: Yes
Indoor/Outdoor: Inside
Room size: Every type
Ventilation Rate: 1 change per hour

Contributing scenario: PROC15 industrial

Exposure duration (min): 480
Product type: liquid
Process temperature: 15-25°C
Vapor pressure at process temperature: 2500Pa
%: <25
Near field CV / Far CL: CL
Activity class: Transfer of a liquid product <0.1 l/min
Activity subclass: Falling liquids/handling reducing product/adjacent air contact
Primary control measures: Localized ventilation/hood
Secondary control measures: none
Segregation: none
Personal protection: none
Environment cleaning: Yes
Indoor/Outdoor: Inside
Room size: Every type
Ventilation Rate: 1 change per hour

Contributing scenario: PROC5 professional

Exposure duration (min): 180
Product type: liquid
Process temperature: 15-25°C
Vapor pressure at process temperature: 2500Pa
%: <5
Near field CV / Far CL: CL
Activity class: Activities with open containers
Activity subclass: Activities with open containers: open area <0.3 m²
Primary control measures: none
Secondary control measures: Low level of containment
Segregation: none
Personal protection: none
Environment cleaning: Yes
Indoor/Outdoor: Inside
Room size: Every type
Ventilation Rate: 1 change per hour

Contributing scenario: PROC5 professional

Exposure duration (min): 300
Product type: liquid
Process temperature: 15-25°C
Vapor pressure at process temperature: 2500Pa
%: <5
Near field CV / Far CL: CV
Activity class: Liquid product transfer: 1-10 l/min
Activity subclass: Falling liquids/spray loading
Primary control measures: none
Secondary control measures: Low level of containment
Environment cleaning: Yes
Indoor/Outdoor: Inside
Room size: Every type
Ventilation Rate: 1 change per hour

Contributing scenario: PROC9 professional

Exposure duration (min): 480
Product type: liquid
Process temperature: 15-25°C
Vapor pressure at process temperature: 2500Pa
%: <5
Near field CV / Far CL: CV
Activity class: Transfer of a liquid product <0.1 l/min
Activity subclass: Falling liquids/spray loading
Primary control measures: none
Secondary control measures: Low level of containment
Environment cleaning: Yes
Indoor/Outdoor: Inside
Room size: Every type
Ventilation Rate: 1 change per hour

Contributing scenario: PROC10 professional

Exposure duration (min): 240
Product type: liquid
Process temperature: 15-25°C
Vapor pressure at process temperature: 2500Pa
%: <5
Near field CV / Far CL: CV
Activity class: Diffusion of liquids
Activity subclass: <1m²/hour
Primary control measures: none
Secondary control measures: Low level of containment
Environment cleaning: Yes
Indoor/Outdoor: Inside
Room size: Every type
Ventilation Rate: 3 refills per hour

Contributing scenario: PROC11 professional

Exposure duration (min): 60
Product type: liquid
Process temperature: 15-25°C
Vapor pressure at process temperature: 2500Pa
%: <5
Near field CV / Far CL: CV
Activity class: Spray applications of liquids on surfaces
Activity subclass: Application in all directions, use of lightly compressed air; speed <3m²/min
Primary control measures: none
Secondary control measures: Low level of containment
Environment cleaning: Yes
Indoor/Outdoor: Inside
Room size: Every type
Ventilation Rate: 3 refills per hour

Contributing scenario: PROC13 professional

Exposure duration (min): 240
Product type: liquid
Process temperature: 15-25°C
Vapor pressure at process temperature: 2500Pa
%: <5
Near field CV / Far CL: CL
Activity class: Activities with open containers
Activity subclass: Open area >1 m²
Primary control measures: none
Secondary control measures: Low level of containment
Environment cleaning: Yes
Indoor/Outdoor: Inside
Room size: Every type
Ventilation Rate: 1 change per hour

Contributing scenario: PROC15 professional

Exposure duration (min): 480
Product type: liquid
Process temperature: 15-25°C
Vapor pressure at process temperature: 2500Pa
%: <5
Near field CV / Far CL: CL
Activity class: Transfer of a liquid product, <0.1 l/min
Activity subclass: Falling liquids/handling reducing product/adjacent air contact
Primary control measures: none
Secondary control measures: none
Segregation: none
Personal protection: none
Environment cleaning: Yes
Indoor/Outdoor: Inside
Room size: Every type
Ventilation Rate: 1 change per hour