

BEZPEČNOSTNÍ LIST

podle nařízení Evropského parlamentu a Rady (ES) č. 1907/2006 (REACH),
v platném znění



LACTIC ACID 80%

Datum vytvoření 24. října 2013
Datum revize 07. září 2018 Číslo verze 4.0

ODDÍL 1: Identifikace látky/směsi a společnosti/podniku

1.1 Identifikátor výrobku

Látka / směs	LACTIC ACID 80%
Chemický název	látko
Číslo CAS	Kyselina mléčná
Číslo ES (EINECS)	79-33-4
Registrační číslo	201-196-2
Další názvy látky	01-2119474164-39-XXXX kyselina L(+)-mléčná, kyselina 2-hydroxypropionová, kyselina 1-hydroxyethan-1-karboxylová

1.2 Příslušná určená použití látky nebo směsi a nedoporučená použití

Určená použití látky	Potravinové/ krmné přísady, léčivé látky, osobní péče, čisticí prostředky, biocidní výrobky, průmyslové použití.
Nedoporučená použití látky	Produkt nesmí být používán jinými způsoby, než které jsou uvedeny v oddíle 1.
Zpráva o chemické bezpečnosti	Byla zpracována.
Přílohou bezpečnostního listu je scénář expozice.	

1.3 Podrobné údaje o dodavateli bezpečnostního listu

Dodavatel

Jméno nebo obchodní jméno	Ekokoza s.r.o.
Adresa	Fryčovice 297, Fryčovice, 73945
Identifikační číslo (IČO)	Česká republika
Telefon	07508247
Email	605779993
Adresa www stránek	obchod@ekokoza.cz
	www.ekokoza.cz

Adresa elektronické pošty odborně způsobilé osoby odpovědné za bezpečnostní list

Jméno	Ekokoza s.r.o.
Email	obchod@ekokoza.cz

1.4 Telefonní číslo pro naléhavé situace

Klinika nemocí z povolání, Toxikologické informační středisko (TIS), Na Bojišti 1, 128 08 Praha 2, nepřetržitě 224 919 293 nebo 224 915 402

ODDÍL 2: Identifikace nebezpečnosti

2.1 Klasifikace látky nebo směsi

Klasifikace látky podle nařízení (ES) č. 1272/2008

Látka je klasifikována jako nebezpečná.

Skin Irrit. 2, H315
Eye Dam. 1, H318

Plný text všech klasifikací a H-vět je uveden v oddíle 16.

Nejzávažnější nepříznivé účinky na lidské zdraví a životní prostředí

Způsobuje vážné poškození očí. Dráždí kůži.

2.2 Prvky označení

Výstražný symbol nebezpečnosti



Signální slovo

Nebezpečí

Nebezpečná látka

Kyselina mléčná (ES: 201-196-2; CAS: 79-33-4)

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Standardní věty o nebezpečnosti

H315 Dráždí kůži.
H318 Způsobuje vážné poškození očí.

Pokyny pro bezpečné zacházení

P280 Používejte ochranné brýle.
P302+P352 PŘI STYKU S KŮŽÍ: Omyjte velkým množstvím vody a mýdla.
P305+P351+P338 PŘI ZASAŽENÍ OČÍ: Několik minut opatrně vyplachujte vodou. Vyjměte kontaktní čočky, jsou-li nasazeny a pokud je lze vyjmout snadno. Pokračujte ve vyplachování.
P310 Okamžitě volejte lékaře.
P332+P313 Při podráždění kůže: Vyhledejte lékařskou pomoc/ošetření.
P362+P364 Kontaminovaný oděv svlékněte a před opětovným použitím vyperte.

2.3 Další nebezpečnost

Látka nesplňuje kritéria pro látky PBT nebo vPvB v souladu s přílohou XIII, nařízení (ES) č. 1907/2006 (REACH) v platném znění.

ODDÍL 3: Složení/informace o složkách

3.1 Látky

Chemická charakteristika

Níže uvedená látka.

Identifikační čísla	Název látky	Obsah v % hmotnosti	Klasifikace dle nařízení (ES) č. 1272/2008	Pozn.
CAS: 79-33-4 ES: 201-196-2 Registrační číslo: 01-2119474164-39-XXXX	hlavní složka látky Kyselina mléčná	>76	Skin Irrit. 2, H315 Eye Dam. 1, H318	

Plný text všech klasifikací a H-vět je uveden v oddíle 16.

ODDÍL 4: Pokyny pro první pomoc

4.1 Popis první pomoci

Dbejte na vlastní bezpečnost. Projeví-li se zdravotní potíže nebo v případě pochybností, uvědomte lékaře a poskytněte mu informace z tohoto Bezpečnostního listu.

Při vdechnutí

Okamžitě přerušte expozici, dopravte postiženého na čerstvý vzduch.

Při styku s kůží

Odložte potřísněný oděv. Omyjte postižené místo velkým množstvím pokud možno vlažné vody. Pokud nedošlo k poranění pokožky, je vhodné použít i mýdlo, mýdlový roztok nebo šampon. Zajistěte lékařské ošetření, přetrvává-li podráždění kůže.

Při zasažení očí

Ihned vyplachujte oči proudem tekoucí vody, rozevřete oční víčka (třeba i násilím); pokud má postižený kontaktní čočky, neprodleně je vyjměte. V žádném případě neprovádějte neutralizaci! Výplach provádějte 10-30 minut od vnitřního koutku k zevnímu, aby nebylo zasaženo druhé oko. Zajistěte co nejrychleji lékařské ošetření. K vyšetření musí být odeslán každý i v případě malého zasažení.

Při požití

NEVYVOLÁVEJTE ZVRACENÍ! Vypláchněte ústní dutinu vodou a dejte vypít 2-5 dl vody. U osoby, která má zdravotní obtíže, zajistěte lékařské ošetření.

4.2 Nejdůležitější akutní a opožděné symptomy a účinky

Při vdechnutí

Vdechování par může způsobit poleptání dýchacího traktu.

Při styku s kůží

Dráždí kůži.

Při zasažení očí

Způsobuje vážné poškození očí.

Při požití

Může dojít k poleptání trávicího traktu.

BEZPEČNOSTNÍ LIST

podle nařízení Evropského parlamentu a Rady (ES) č. 1907/2006 (REACH),
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LACTIC ACID 80%

Datum vytvoření	24. října 2013	Číslo verze	4.0
Datum revize	07. září 2018		

4.3 Pokyn týkající se okamžité lékařské pomoci a zvláštního ošetření
neuvedeno

ODDÍL 5: Opatření pro hašení požáru

5.1 Hasiva

Vhodná hasiva

Pěna odolná alkoholu, oxid uhličitý, prášek, voda tříštěný proud, vodní mlha.

Nevhodná hasiva

Voda - plný proud.

5.2 Zvláštní nebezpečnost vyplývající z látky nebo směsi

Při požáru může docházet ke vzniku toxických plynů. Vdechování nebezpečných rozkladných (pyrolyzních) produktů může způsobit vážné poškození zdraví.

5.3 Pokyny pro hasiče

Použijte izolační dýchací přístroj a celotělový ochranný oblek. Kontaminované hasivo nenechte uniknout do kanalizace, povrchových a spodních vod.

ODDÍL 6: Opatření v případě náhodného úniku

6.1 Opatření na ochranu osob, ochranné prostředky a nouzové postupy

Používejte osobní ochranné pracovní prostředky. Postupujte podle pokynů obsažených v oddílech 7 a 8.

6.2 Opatření na ochranu životního prostředí

Zabraňte kontaminaci půdy a úniku do povrchových nebo spodních vod.

6.3 Metody a materiál pro omezení úniku a pro čištění

Rozlitý produkt pokryjte vhodným absorbujícím materiálem (písek, křemelina, zemina, univerzální absorbenty), shromážděte v dobře uzavřených nádobách a odstraňte dle oddílu 13. Při úniku velkých množství produktu informujte hasiče a další kompetentní orgány. Po odstranění produktu umyjte kontaminované místo velkým množstvím vody.

6.4 Odkaz na jiné oddíly

Viz oddíl 7., 8. a 13.

ODDÍL 7: Zacházení a skladování

7.1 Opatření pro bezpečné zacházení

Zabraňte kontaktu s pokožkou a očima. Nevdechujte aerosoly. Používejte osobní ochranné pracovní prostředky podle oddílu 8. Dbejte na platné právní předpisy o bezpečnosti a ochraně zdraví.

7.2 Podmínky pro bezpečné skladování látek a směsí včetně neslučitelných látek a směsí

Skladujte v těsně uzavřených obalech na chladných, suchých a dobře větraných místech k tomu určených.

Specifické požadavky nebo pravidla vztahující se k látce/směsi

Nejsou stanoveny

7.3 Specifické konečné/specifická konečná použití

neuvedeno

ODDÍL 8: Omezování expozice/osobní ochranné prostředky

8.1 Kontrolní parametry

žádné

8.2 Omezování expozice

Dbejte obvyklých opatření na ochranu zdraví při práci a zejména na dobré větrání. Toho lze dosáhnout pouze místním odsáváním nebo účinným celkovým větráním. Při práci nejezte, nepijte a nekuřte. Po práci a před přestávkou na jídlo a oddech si důkladně omyjte ruce vodou a mýdlem.

Ochrana očí a obličeje

Ochranné brýle nebo obličejový štít (podle charakteru vykonávané práce).

Ochrana kůže

Ochrana rukou: Ochranné rukavice odolné výrobku. Dbejte doporučení konkrétního výrobce rukavic při výběru vhodné tloušťky, materiálu a propustnosti. Dbejte dalších doporučení výrobce. Jiná ochrana: Ochranný pracovní oděv. Při znečištění pokožky ji důkladně omyjte.

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Datum vytvoření 24. října 2013
Datum revize 07. září 2018 Číslo verze 4.0

Ochrana dýchacích cest

Zajistěte dostatečné větrání.

Tepelné nebezpečí

Neuvedeno.

Omezování expozice životního prostředí

Dbejte obvyklých opatření na ochranu životního prostředí, viz oddíl 6.2.

Další údaje

Přílohou bezpečnostního listu je scénář expozice. Přílohou bezpečnostního listu je scénář expozice.

ODDÍL 9: Fyzikální a chemické vlastnosti

9.1 Informace o základních fyzikálních a chemických vlastnostech

vzhled	Viskózní
skupenství	kapalné při 20°C
barva	Nažloutlá až žlutá
zápach	údaj není k dispozici
prahová hodnota zápachu	údaj není k dispozici
pH	<2 (neředěno při 25 °C)
bod tání / bod tuhnutí	údaj není k dispozici
počáteční bod varu a rozmezí bodu varu	110-130 °C
bod vzplanutí	údaj není k dispozici
rychlost odpařování	údaj není k dispozici
hořlavost (pevné látky, plyny)	Neaplikovatelné.
horní/dolní mezní hodnoty hořlavosti nebo výbušnosti	
meze hořlavosti	údaj není k dispozici
meze výbušnosti	údaj není k dispozici
tlak páry	údaj není k dispozici
hustota páry	údaj není k dispozici
relativní hustota	1,10 - 1,25 (voda = 1)
rozpustnost	
rozpustnost ve vodě	plně mísitelná
rozpustnost v tucích	údaj není k dispozici
rozdělovací koeficient: n-oktanol/voda	-0,62
teplota samovznícení	údaj není k dispozici
teplota rozkladu	údaj není k dispozici
viskozita	5-60 mPa.s
výbušné vlastnosti	Není výbušná.
oxidační vlastnosti	Nemá oxidační vlastnosti.

9.2 Další informace

hustota	1,10-1,25 g/cm ³
teplota vznícení	400 °C

ODDÍL 10: Stálost a reaktivita

10.1 Reaktivita

Při normálních podmínkách je produkt stabilní.

10.2 Chemická stabilita

Při normálních podmínkách je produkt stabilní.

10.3 Možnost nebezpečných reakcí

Nejsou známy.

10.4 Podmínky, kterým je třeba zabránit

Teplota >200 °C.

10.5 Neslučitelné materiály

Hydroxidy, báze, oxidační činidla.

10.6 Nebezpečné produkty rozkladu

Za normálního způsobu použití nevznikají. Při vysokých teplotách a při požáru vznikají nebezpečné produkty, jako např. oxid uhelnatý a oxid uhličitý.

BEZPEČNOSTNÍ LIST

podle nařízení Evropského parlamentu a Rady (ES) č. 1907/2006 (REACH),
v platném znění



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Datum vytvoření 24. října 2013
Datum revize 07. září 2018 Číslo verze 4.0

ODDÍL 11: Toxikologické informace

11.1 Informace o toxikologických účincích

Pro látku nejsou žádné toxikologické údaje k dispozici.

Akutní toxicita

Na základě dostupných údajů nejsou kritéria pro klasifikaci splněna.

Žíravost / dráždivost pro kůži

Dráždí kůži.

Vážné poškození očí / podráždění očí

Způsobuje vážné poškození očí.

Senzibilizace dýchacích cest / senzibilizace kůže

Na základě dostupných údajů nejsou kritéria pro klasifikaci splněna.

Mutagenita v zárodečných buňkách

Na základě dostupných údajů nejsou kritéria pro klasifikaci splněna.

Karcinogenita

Na základě dostupných údajů nejsou kritéria pro klasifikaci splněna.

Toxicita pro reprodukci

Na základě dostupných údajů nejsou kritéria pro klasifikaci splněna.

Toxicita pro specifické cílové orgány – jednorázová expozice

Na základě dostupných údajů nejsou kritéria pro klasifikaci splněna.

Toxicita pro specifické cílové orgány – opakovaná expozice

Na základě dostupných údajů nejsou kritéria pro klasifikaci splněna.

Nebezpečnost při vdechnutí

Na základě dostupných údajů nejsou kritéria pro klasifikaci splněna.

ODDÍL 12: Ekologické informace

12.1 Toxicita

Akutní toxicita

Na základě dostupných údajů nejsou kritéria pro klasifikaci splněna.

12.2 Perzistence a rozložitelnost

Biologická odbouratelnost

Kyselina mléčná

Parametr	Hodnota	Doba expozice	Prostředí	Výsledek
BSK	0,45 mg/kg	5 den		
BSK	0,6 mg/kg	20 den		
CHSK	0,9 mg/kg			

Biochemická spotřeba kyslíku (BSK): 0,45 mg/mg, doba inkubace: 5 d; 0,6 mg/mg, doba inkubace: 20 d
Chemická spotřeba kyslíku (CHSK): 0,9 mg/mg

12.3 Bioakumulační potenciál

Produkt je mísitelný s vodou a snadno biologicky odbouratelný ve vodě i půdě. Hromadění v organismu se neočekává.

12.4 Mobilita v půdě

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podle nařízení Evropského parlamentu a Rady (ES) č. 1907/2006 (REACH),
v platném znění



LACTIC ACID 80%

Datum vytvoření	24. října 2013	Číslo verze	4.0
Datum revize	07. září 2018		

Neuvedeno.

12.5 Výsledky posouzení PBT a vPvB

Produkt neobsahuje látky splňující kritéria pro látky PBT nebo vPvB v souladu s přílohou XIII, nařízení (ES) č. 1907/2006 (REACH) v platném znění.

12.6 Jiné nepříznivé účinky

Neuvedeno.

ODDÍL 13: Pokyny pro odstraňování

13.1 Metody nakládání s odpady

Nebezpečí kontaminace životního prostředí, postupujte podle zákona č. 185/2001 Sb. o odpadech, v platném znění, a podle prováděcích předpisů o zneškodňování odpadů. Postupujte podle platných předpisů o zneškodňování odpadů. Nepoužitý výrobek a znečištěný obal uložte do označených nádob pro sběr odpadu a předejte k odstranění oprávněné osobě k odstranění odpadu (specializované firmě), která má oprávnění k této činnosti. Nepoužitý výrobek nevylévat do kanalizace. Nesmí se odstraňovat společně s komunálními odpady. Prázdné obaly je možno energeticky využít ve spalovně odpadů nebo ukládat na skládce příslušného zařazení. Dokonale vyčištěné obaly je možné předat k recyklaci.

Právní předpisy o odpadech

Zákon č. 185/2001 Sb., o odpadech, v platném znění. Vyhláška č. 383/2001 Sb., o podrobnostech nakládání s odpady, v platném znění. Vyhláška č. 93/2016 Sb., (katalog odpadů) v platném znění. Vyhláška č. 94/2016 Sb., o hodnocení nebezpečných vlastností odpadů, v platném znění.

ODDÍL 14: Informace pro přepravu

14.1 UN číslo

Nepodléhá předpisům ADR.

14.2 Oficiální (OSN) pojmenování pro přepravu

neuvedeno

14.3 Třída/třídy nebezpečnosti pro přepravu

neuvedeno

14.4 Obalová skupina

neuvedeno

14.5 Nebezpečnost pro životní prostředí

neuvedeno

14.6 Zvláštní bezpečnostní opatření pro uživatele

Odkaz v oddílech 4 až 8.

14.7 Hromadná přeprava podle přílohy II úmluvy MARPOL a předpisu IBC

neuvedeno

ODDÍL 15: Informace o předpisech

15.1 Předpisy týkající se bezpečnosti, zdraví a životního prostředí/specifické právní předpisy týkající se látky nebo směsi

Nařízení Evropského parlamentu a Rady (ES) č. 1907/2006 ze dne 18. prosince 2006 o registraci, hodnocení, povolování a omezování chemických látek, o zřízení Evropské agentury pro chemické látky, o změně směrnice 1999/45/ES a o zrušení nařízení Rady (EHS) č. 793/93, nařízení Komise (ES) č. 1488/94, směrnice Rady 76/769/EHS a směrnic Komise 91/155/EHS, 93/67/EHS, 93/105/ES a 2000/21/ES v platném znění. Nařízení Evropského parlamentu a Rady (ES) č. 1272/2008 ze dne 16. prosince 2008 o klasifikaci, označování a balení látek a směsí, o změně a zrušení směrnic 67/548/EHS a 1999/45/ES a o změně nařízení (ES) č. 1907/2006 v platném znění. Zákon č. 350/2011 Sb., o chemických látkách a chemických směsích a o změně některých zákonů (chemický zákon). Zákon č. 258/2000 Sb., o ochraně veřejného zdraví v platném znění. Nařízení vlády č. 361/2007 Sb., kterým se stanoví podmínky ochrany zdraví při práci v platném znění. Vyhláška č. 415/2012 Sb., o přípustné úrovni znečišťování a jejím zjišťování a o provedení některých dalších ustanovení zákona o ochraně ovzduší v platném znění. Zákon č. 185/2001 Sb., o odpadech a jeho prováděcí předpisy v platném znění. Zákon č. 201/2012 Sb., o ochraně ovzduší v platném znění. Vyhláška č. 432/2003 Sb., kterou se stanoví podmínky pro zařazování prací do kategorií, limitní hodnoty ukazatelů biologických expozičních testů, podmínky odběru biologického materiálu pro provádění biologických expozičních testů a náležitosti hlášení prací s azbestem a biologickými činiteli v platném znění.

15.2 Posouzení chemické bezpečnosti

Bylo provedeno.

ODDÍL 16: Další informace

BEZPEČNOSTNÍ LIST



podle nařízení Evropského parlamentu a Rady (ES) č. 1907/2006 (REACH),
v platném znění

LACTIC ACID 80%

Datum vytvoření	24. října 2013	Číslo verze	4.0
Datum revize	07. září 2018		

Seznam standardních vět o nebezpečnosti použitých v bezpečnostním listu

H315 Dráždí kůži.
H318 Způsobuje vážné poškození očí.

Seznam pokynů pro bezpečné zacházení použitých v bezpečnostním listu

P280 Používejte ochranné brýle.
P305+P351+P338 PŘI ZASAŽENÍ OČÍ: Několik minut opatrně vyplachujte vodou. Vyjměte kontaktní čočky, jsou-li nasazené a pokud je lze vyjmout snadno. Pokračujte ve vyplachování.
P310 Okamžitě volejte lékaře.
P302+P352 PŘI STYKU S KŮŽÍ: Omyjte velkým množstvím vody a mýdla.
P332+P313 Při podráždění kůže: Vyhledejte lékařskou pomoc/ošetření.
P362+P364 Kontaminovaný oděv svlékněte a před opětovným použitím vyperte.

Další informace důležité z hlediska bezpečnosti a ochrany zdraví člověka

Výrobek nesmí být - bez zvláštního souhlasu výrobce/dovozce - používán k jinému účelu, než je uvedeno v oddílu 1. Uživatel je odpovědný za dodržování všech souvisejících předpisů na ochranu zdraví.

Legenda ke zkratkám a zkratkovým slovům použitým v bezpečnostním listu

ADR	Evropská dohoda o mezinárodní silniční přepravě nebezpečných věcí
BCF	Biokoncentrační faktor
CAS	Chemical Abstracts Service
CLP	Nařízení (ES) č. 1272/2008 o klasifikaci, označování a balení látek a směsí
DNEL	Odvozená úroveň, při které nedochází k nepříznivým účinkům
EC ₅₀	Koncentrace látky, při které je zasaženo 50% populace
EINECS	Evropský seznam existujících obchodovaných chemických látek
EmS	Pohotovostní plán
ES	Číslo ES je číselný identifikátor látek na seznamu ES
EU	Evropská unie
IATA	Mezinárodní asociace leteckých dopravců
IBC	Mezinárodní předpis pro stavbu a vybavení lodí hromadně přepravujících nebezpečné chemikálie
IC ₅₀	Koncentrace působící 50% blokádu
ICAO	Mezinárodní organizace pro civilní letectví
IMDG	Mezinárodní námořní přeprava nebezpečného zboží
INCI	Mezinárodní nomenklatura kosmetických přísad
ISO	Mezinárodní organizace pro normalizaci
IUPAC	Mezinárodní unie pro čistou a užitou chemii
LC ₅₀	Smrtelná koncentrace látky, při které lze očekávat, že způsobí smrt 50% populace
LD ₅₀	Smrtelná dávka látky, při které lze očekávat, že způsobí smrt 50% populace
LOAEC	Nejnižší koncentrace s pozorovaným nepříznivým účinkem
LOAEL	Nejnižší dávka s pozorovaným nepříznivým účinkem
log Kow	Oktanól-voda rozdělovací koeficient
MARPOL	Mezinárodní úmluva o zabránění znečišťování z lodí
NOAEC	Koncentrace bez pozorovaného nepříznivého účinku
NOAEL	Hodnota dávky bez pozorovaného nepříznivého účinku
NOEC	Koncentrace bez pozorovaných účinků
NOEL	Hodnota dávky bez pozorovaného účinku
NPK	Nejvyšší přípustná koncentrace
OEL	Expoziční limity na pracovišti
PBT	Perzistentní, bioakumulativní a toxický
PEL	Přípustný expoziční limit
PNEC	Odhad koncentrace, při které nedochází k nepříznivým účinkům
ppm	Počet částic na milion (miliontina)
REACH	Registrace, hodnocení, povolování a omezování chemických látek
RID	Dohoda o přepravě nebezpečných věcí po železnici
UN	Čtyřmístné identifikační číslo látky nebo předmětu převzaté ze Vzorových předpisů OSN
UCVB	Látka s neznámým nebo proměnlivým složením, komplexní reakční produkt nebo biologický materiál
VOC	Těkavé organické sloučeniny
vPvB	Vysoce perzistentní a vysoce bioakumulativní

BEZPEČNOSTNÍ LIST

podle nařízení Evropského parlamentu a Rady (ES) č. 1907/2006 (REACH),
v platném znění



LACTIC ACID 80%

Datum vytvoření	24. října 2013	Číslo verze	4.0
Datum revize	07. září 2018		

Eye Dam. Vážné poškození očí
Skin Irrit. Dráždivost pro kůži

Pokyny pro školení

Seznámit pracovníky s doporučeným způsobem použití, povinnými ochrannými prostředky, první pomocí a zakázanými manipulacemi se směsí.

Doporučená omezení použití

neuvedeno

Informace o zdrojích údajů použitých při sestavování bezpečnostního listu

Nařízení Evropského parlamentu a Rady (ES) č. 1907/2006 (REACH) v platném znění. Nařízení Evropského parlamentu a Rady (ES) č. 1272/2008 v platném znění. Zákon č. 350/2011 Sb., o chemických látkách a chemických směsích v platném znění. Zásady pro poskytování první pomoci při expozici chemickým látkám (doc. MUDr. Daniela Pelclová, CSc., MUDr. Alexandr Fuchs, CSc., MUDr. Miroslava Hornychová, CSc., MUDr. Zdeňka Trávníčková, CSc., Jiřina Fridrichovská, prom. chem.). Údaje od výrobce látky/směsi, pokud jsou k dispozici - údaje z registrační dokumentace.

Provedené změny (které informace byly přidány, vypuštěny nebo upraveny)

Verze 4.0 nahrazuje verzi BL z 08.08.2018. Změny byly provedeny ve všech oddílech.

Prohlášení

Bezpečnostní list obsahuje údaje pro zajištění bezpečnosti a ochrany zdraví při práci a ochrany životního prostředí. Uvedené údaje odpovídají současnému stavu vědomostí a zkušeností a jsou v souladu s platnými právními předpisy. Nemohou být považovány za záruku vhodnosti a použitelnosti výrobku pro konkrétní aplikaci.

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

L(+)-Lactic Acid

Version 2.0

Revision Date: 24.07.2017

1. Short title of Exposure Scenario: (Ref.: 1) Use in agriculture, forestry, fishery

Main User Groups	: SU 22: Professional uses: Public domain (administration, education, entertainment, services, craftsmen)
Sectors of end-use	: SU1: Agriculture, forestry, fishery SU 22: Professional uses: Public domain (administration, education, entertainment, services, craftsmen)
Chemical product category	: PC9a: Coatings and paints, thinners, paint removers PC12: Fertilizers PC15: Non-metal-surface treatment products PC20: Products such as pH-regulators, flocculants, precipitants, neutralization agents PC21: Laboratory chemicals
Process categories	: PROC3: Use in closed batch process (synthesis or formulation) PROC4: Use in batch and other process (synthesis) where opportunity for exposure arises PROC8b: Transfer of substance or preparation (charging/discharging) from/ to vessels/ large containers at dedicated facilities PROC9: Transfer of substance or preparation into small containers (dedicated filling line, including weighing) PROC15: Use as laboratory reagent
Environmental Release Categories	: ERC2: Formulation of preparations ERC4: Industrial use of processing aids in processes and products, not becoming part of articles ERC8a: Wide dispersive indoor use of processing aids in open systems ERC9a: Wide dispersive indoor use of substances in closed systems

2.1 Contributing scenario controlling environmental exposure for: ERC2, ERC4, ERC8a, ERC9a: Formulation of preparations, Industrial use of processing aids in processes and products, not becoming part of articles, Wide dispersive indoor use of processing aids in open systems, Wide dispersive indoor use of substances in closed systems

Product characteristics	
Concentration of the Substance in Mixture/Article	: Covers the percentage of the substance in the product up to 100 % (unless stated differently).
Amount used	
EU tonnage	: 58000 t/a

Technical conditions and measures / Organizational measures

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

L(+)-Lactic Acid

Version 2.0

Revision Date: 24.07.2017

Remarks

: No RMMs applicable. No hazard to the environment. Environmental exposure assessment for this scenario is not relevant.

2.2 Contributing scenario controlling worker exposure for: PROC3, PROC4, PROC8b, PROC9, PROC15: Use in closed batch process (synthesis or formulation), Use in batch and other process (synthesis) where opportunity for exposure arises, Transfer of substance or preparation (charging/ discharging) from/ to vessels/ large containers at dedicated facilities, Transfer of substance or preparation into small containers (dedicated filling line, including weighing), Use as laboratory reagent

Product characteristics

Concentration of the Substance in Mixture/Article : Covers the percentage of the substance in the product up to 100 % (unless stated differently).

Technical conditions and measures

Ensure adequate ventilation, especially in confined areas. Avoid temperatures above 200°C.

Organisational measures to prevent /limit releases, dispersion and exposure

Do not eat, drink or smoke when using this product. Avoid skin contact. Remove and wash contaminated clothing before re-use.

Conditions and measures related to personal protection, hygiene and health evaluation

Breathing apparatus only if aerosol or dust is formed.

Rubber gloves

Face-shield

Boots

Chemical resistant apron

Long sleeved clothing

Note

Local effects

Risk Management Measures are based on qualitative risk characterisation.

3. Exposure estimation and reference to its source

Environment

Contributing Scenario	Exposure Assessment	Specific conditions	Compartment	Value	Level of Exposure	RCR
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SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

L(+)-Lactic Acid

Version 2.0

Revision Date: 24.07.2017

	Method					
	Qualitative approach used to conclude safe use.		All compartments			

Remarks: Environmental exposure assessment for this scenario is not relevant.
No hazard to the environment.

Workers

Contributing Scenario	Exposure Assessment Method	Specific conditions	Value	Level of Exposure	RCR
All PROCs	Qualitative approach used to conclude safe use.				

All PROCs : All PROCs mentioned in section 1.

4. Guidance to Downstream User to evaluate whether he works inside the boundaries set by the Exposure Scenario

The immediate downstream user is required to evaluate whether the operational conditions and risk management measures described in the exposure scenario fit to his use.
If other OC/RMM are adopted, the user should ensure that risks are managed to at least equivalent levels.

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

L(+)-Lactic Acid

Version 2.0

Revision Date: 24.07.2017

1. Short title of Exposure Scenario: (Ref.: 2) Use in mining

- Main User Groups : SU 22: Professional uses: Public domain (administration, education, entertainment, services, craftsmen)
- Sectors of end-use : SU2a: Mining, (without offshore industries)
SU2b: Offshore industries
SU 22: Professional uses: Public domain (administration, education, entertainment, services, craftsmen)
- Process categories : PROC2: Use in closed, continuous process with occasional controlled exposure
- Environmental Release Categories : ERC2: Formulation of preparations
ERC4: Industrial use of processing aids in processes and products, not becoming part of articles

2.1 Contributing scenario controlling environmental exposure for: ERC2, ERC4: Formulation of preparations, Industrial use of processing aids in processes and products, not becoming part of articles

- Product characteristics
- Concentration of the Substance in Mixture/Article : Covers the percentage of the substance in the product up to 100 % (unless stated differently).
- Amount used
- EU tonnage : 58000 t/a
- Technical conditions and measures / Organizational measures
- Remarks : No RMMs applicable. No hazard to the environment. Environmental exposure assessment for this scenario is not relevant.

2.2 Contributing scenario controlling worker exposure for: PROC2: Use in closed, continuous process with occasional controlled exposure

- Product characteristics
- Concentration of the Substance in Mixture/Article : Covers the percentage of the substance in the product up to 100 % (unless stated differently).
- Technical conditions and measures
- Ensure adequate ventilation, especially in confined areas. Avoid temperatures above 200°C.

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

L(+)-Lactic Acid

Version 2.0

Revision Date: 24.07.2017

Organisational measures to prevent /limit releases, dispersion and exposure

Do not eat, drink or smoke when using this product. Avoid skin contact. Remove and wash contaminated clothing before re-use.

Conditions and measures related to personal protection, hygiene and health evaluation

Breathing apparatus only if aerosol or dust is formed.

Rubber gloves

Face-shield

Boots

Chemical resistant apron

Long sleeved clothing

Note

Local effects

Risk Management Measures are based on qualitative risk characterisation.

3. Exposure estimation and reference to its source

Environment

Contributing Scenario	Exposure Assessment Method	Specific conditions	Compartment	Value	Level of Exposure	RCR
	Qualitative approach used to conclude safe use.		All compartments			

Remarks: Environmental exposure assessment for this scenario is not relevant.
No hazard to the environment.

Workers

Contributing Scenario	Exposure Assessment Method	Specific conditions	Value	Level of Exposure	RCR
All PROCs	Qualitative approach used to conclude safe use.				

All PROCs : All PROCs mentioned in section 1.

4. Guidance to Downstream User to evaluate whether he works inside the boundaries set by the Exposure Scenario

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

L(+)-Lactic Acid

Version 2.0

Revision Date: 24.07.2017

The immediate downstream user is required to evaluate

whether the operational conditions and risk management measures described in the exposure scenario fit to his use.

If other OC/RMM are adopted, the user should ensure that risks are managed to at least equivalent levels.

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

L(+)-Lactic Acid

Version 2.0

Revision Date: 24.07.2017

1. Short title of Exposure Scenario: (Ref.: 3) Use in mining (without offshore industries)

Main User Groups	: SU 22: Professional uses: Public domain (administration, education, entertainment, services, craftsmen)
Sectors of end-use	: SU2a: Mining, (without offshore industries) SU 3: Industrial uses: Uses of substances as such or in preparations at industrial sites SU 22: Professional uses: Public domain (administration, education, entertainment, services, craftsmen)
Chemical product category	: PC37: Water treatment chemicals
Process categories	: PROC2: Use in closed, continuous process with occasional controlled exposure
Environmental Release Categories	: ERC4: Industrial use of processing aids in processes and products, not becoming part of articles

2.1 Contributing scenario controlling environmental exposure for: ERC4: Industrial use of processing aids in processes and products, not becoming part of articles

Product characteristics	
Concentration of the Substance in Mixture/Article	: Covers the percentage of the substance in the product up to 100 % (unless stated differently).
Amount used	
EU tonnage	: 58000 t/a
Technical conditions and measures / Organizational measures	
Remarks	: No RMMs applicable. No hazard to the environment. Environmental exposure assessment for this scenario is not relevant.

2.2 Contributing scenario controlling worker exposure for: PROC2: Use in closed, continuous process with occasional controlled exposure

Product characteristics	
Concentration of the Substance in Mixture/Article	: Covers the percentage of the substance in the product up to 100 % (unless stated differently).
Technical conditions and measures	
Ensure adequate ventilation, especially in confined areas. Avoid temperatures above 200°C.	

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

L(+)-Lactic Acid

Version 2.0

Revision Date: 24.07.2017

Organisational measures to prevent /limit releases, dispersion and exposure

Do not eat, drink or smoke when using this product. Avoid skin contact. Remove and wash contaminated clothing before re-use.

Conditions and measures related to personal protection, hygiene and health evaluation

Breathing apparatus only if aerosol or dust is formed.

Rubber gloves

Face-shield

Boots

Chemical resistant apron

Long sleeved clothing

Note

Local effects

Risk Management Measures are based on qualitative risk characterisation.

3. Exposure estimation and reference to its source

Environment

Contributing Scenario	Exposure Assessment Method	Specific conditions	Compartment	Value	Level of Exposure	RCR
	Qualitative approach used to conclude safe use.		All compartments			

Remarks: Environmental exposure assessment for this scenario is not relevant.
No hazard to the environment.

Workers

Contributing Scenario	Exposure Assessment Method	Specific conditions	Value	Level of Exposure	RCR
All PROCs	Qualitative approach used to conclude safe use.				

All PROCs : All PROCs mentioned in section 1.

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

L(+)-Lactic Acid

Version 2.0

Revision Date: 24.07.2017

4. Guidance to Downstream User to evaluate whether he works inside the boundaries set by the Exposure Scenario

The immediate downstream user is required to evaluate whether the operational conditions and risk management measures described in the exposure scenario fit to his use.
If other OC/RMM are adopted, the user should ensure that risks are managed to at least equivalent levels.

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

L(+)-Lactic Acid

Version 2.0

Revision Date: 24.07.2017

1. Short title of Exposure Scenario: (Ref.: 4) Industrial manufacturing without subsequent relevant service life

Main User Groups	: SU 3: Industrial uses: Uses of substances as such or in preparations at industrial sites
Sectors of end-use	: SU 3: Industrial uses: Uses of substances as such or in preparations at industrial sites
Chemical product category	: PC1: Adhesives, sealants PC3: Air care products PC4: Anti-Freeze and de-icing products PC8: Biocidal products (e.g. Disinfectants, pest control) PC9a: Coatings and paints, thinners, paint removers PC9b: Fillers, putties, plasters, modelling clay PC9c: Finger paints PC14: Metal surface treatment products, including galvanic and electroplating products PC15: Non-metal-surface treatment products PC20: Products such as pH-regulators, flocculants, precipitants, neutralization agents PC21: Laboratory chemicals PC24: Lubricants, greases, release products PC25: Metal working fluids PC31: Polishes and wax blends PC35: Washing and cleaning products (including solvent based products) PC38: Welding and soldering products (with flux coatings or flux cores.), flux products
Process categories	: PROC1: Use in closed process, no likelihood of exposure PROC2: Use in closed, continuous process with occasional controlled exposure PROC3: Use in closed batch process (synthesis or formulation) PROC4: Use in batch and other process (synthesis) where opportunity for exposure arises PROC5: Mixing or blending in batch processes for formulation of preparations and articles (multistage and/ or significant contact) PROC6: Calendering operations PROC7: Industrial spraying PROC8a: Transfer of substance or preparation (charging/ discharging) from/ to vessels/ large containers at non-dedicated facilities PROC8b: Transfer of substance or preparation (charging/ discharging) from/ to vessels/ large containers at dedicated facilities PROC9: Transfer of substance or preparation into small containers (dedicated filling line, including weighing) PROC10: Roller application or brushing PROC11: Non industrial spraying PROC13: Treatment of articles by dipping and pouring PROC14: Production of preparations or articles by tableting,

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

L(+)-Lactic Acid

Version 2.0

Revision Date: 24.07.2017

compression, extrusion, pelletisation
PROC15: Use as laboratory reagent
PROC16: Using material as fuel sources, limited exposure to unburned product to be expected
PROC17: Lubrication at high energy conditions and in partly open process
PROC18: Greasing at high energy conditions
PROC19: Hand-mixing with intimate contact and only PPE available
PROC20: Heat and pressure transfer fluids in dispersive, professional use but closed systems
PROC24: High (mechanical) energy work-up of substances bound in materials and/ or articles
PROC26: Handling of solid inorganic substances at ambient temperature

Environmental Release Categories : ERC2: Formulation of preparations
ERC4: Industrial use of processing aids in processes and products, not becoming part of articles
ERC5: Industrial use resulting in inclusion into or onto a matrix
ERC6b: Industrial use of reactive processing aids
ERC7: Industrial use of substances in closed systems
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
ERC9a: Wide dispersive indoor use of substances in closed systems
ERC9b: Wide dispersive outdoor use of substances in closed systems

2.1 Contributing scenario controlling environmental exposure for: ERC2, ERC4, ERC5, ERC6b, ERC7, ERC8a, ERC8b, ERC8d, ERC8e, ERC9a, ERC 9b: Formulation of preparations, Industrial use of processing aids in process es and products, not becoming part of articles, Industrial use resulting in inclusion into or onto a matrix, Industrial use of reactive processing aids, Industrial use of substances in closed systems, Wide dispersive indoor use of processing aids in open systems, Wide dispersive indoor use of reactive substances in open systems, Wide dispersive outdoor use of processing aids in open systems, Wide dispersive outdoor use of reactive substances in open systems, Wide dispersive indoor use of substances in closed systems, Wide dispersive outdoor use of substances in closed systems

Product characteristics

Concentration of the Substance in Mixture/Article : Covers the percentage of the substance in the product up to 100 % (unless stated differently).

Amount used

EU tonnage : 58000 t/a

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

L(+)-Lactic Acid

Version 2.0

Revision Date: 24.07.2017

Technical conditions and measures / Organizational measures

Remarks

: No RMMs applicable. No hazard to the environment. Environmental exposure assessment for this scenario is not relevant.

2.2 Contributing scenario controlling worker exposure for: PROC1, PROC2, PROC3, PROC4, PROC5, PROC6, PROC7, PROC8a, PROC8b, PROC9, PROC10, PROC11, PROC13, PROC14, PROC15, PROC16, PROC17, PROC18, PROC19, PROC20, PROC24, PROC26: Use in closed process, no likelihood of exposure, Use in closed batch occasional controlled exposure, Use in closed batch Use in batch and other process (synthesis) where opportunity for exposure arises, Mixing or blending in batch processes for formulation of preparations and articles (multistage and/ or significant contact), Calendaring operation s, Industrial spraying, Transfer of substance or preparation (charging/ discharging) from/ to vessels/ large containers at dedicated facilities, Transfer of substance or preparation into weighing), Roller application or brush-by dipping and pouring, Production of small containers (dedicated filling line, including , extrusion, pelletisation, Use as laboratory reagent, Using material as fuel sources, limited exposure to unburned product to be expected, Lubrication at high energy conditions and in partly open process, Greasing at high energy conditions, Hand-mixing with intimate contact and only PPE available, Heat and pressure transfer fluids in dispersive, professional use but closed systems, High (mechanical) energy work-up of substances bound in materials and/ or articles, Handling of solid inorganic substances at ambient temperature

Product characteristics

Concentration of the Substance in Mixture/Article : Covers the percentage of the substance in the product up to 100 % (unless stated differently).

Technical conditions and measures

Ensure adequate ventilation, especially in confined areas. Avoid temperatures above 200°C.

Organisational measures to prevent /limit releases, dispersion and exposure

Do not eat, drink or smoke when using this product. Avoid skin contact. Remove and wash contaminated clothing before re-use.

Conditions and measures related to personal protection, hygiene and health evaluation

Breathing apparatus only if aerosol or dust is formed.
Rubber gloves
Face-shield

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

L(+)-Lactic Acid

Version 2.0

Revision Date: 24.07.2017

Boots
Chemical resistant apron
Long sleeved clothing

Note

Local effects
Risk Management Measures are based on qualitative risk characterisation.

3. Exposure estimation and reference to its source

Environment

Contributing Scenario	Exposure Assessment Method	Specific conditions	Compartment	Value	Level of Exposure	RCR
	Qualitative approach used to conclude safe use.		All compartments			

Remarks: Environmental exposure assessment for this scenario is not relevant.
No hazard to the environment.

Workers

Contributing Scenario	Exposure Assessment Method	Specific conditions	Value	Level of Exposure	RCR
All PROCs	Qualitative approach used to conclude safe use.				

All PROCs : All PROCs mentioned in section 1.

4. Guidance to Downstream User to evaluate whether he works inside the boundaries set by the Exposure Scenario

The immediate downstream user is required to evaluate whether the operational conditions and risk management measures described in the exposure scenario fit to his use.

If other OC/RMM are adopted, the user should ensure that risks are managed to at least equivalent levels.

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

L(+)-Lactic Acid

Version 2.0

Revision Date: 24.07.2017

1. Short title of Exposure Scenario: (Ref.: 5) Industrial manufacturing with subsequent relevant service life

- Main User Groups : SU 3: Industrial uses: Uses of substances as such or in preparations at industrial sites
- Sectors of end-use : SU 3: Industrial uses: Uses of substances as such or in preparations at industrial sites
- Chemical product category : PC9a: Coatings and paints, thinners, paint removers
PC9b: Fillers, putties, plasters, modelling clay
PC9c: Finger paints
PC35: Washing and cleaning products (including solvent based products)
- Process categories : PROC5: Mixing or blending in batch processes for formulation of preparations and articles (multistage and/ or significant contact)
PROC7: Industrial spraying
PROC8a: Transfer of substance or preparation (charging/ discharging) from/ to vessels/ large containers at non-dedicated facilities
PROC8b: Transfer of substance or preparation (charging/ discharging) from/ to vessels/ large containers at dedicated facilities
PROC10: Roller application or brushing
PROC11: Non industrial spraying
- Article categories : AC1: Vehicles
- Environmental Release Categories : ERC4: Industrial use of processing aids in processes and products, not becoming part of articles
ERC5: Industrial use resulting in inclusion into or onto a matrix

2.1 Contributing scenario controlling environmental exposure for: ERC4, ERC5: Industrial use of processing aids in processes and products, not becoming part of articles, Industrial use resulting in inclusion into or onto a matrix

Product characteristics

Concentration of the Substance in Mixture/Article : Covers the percentage of the substance in the product up to 100 % (unless stated differently).

Amount used

EU tonnage : 58000 t/a

Technical conditions and measures / Organizational measures

Remarks : No RMMs applicable. No hazard to the environment. Environmental exposure assessment for this scenario is not relevant.

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

L(+)-Lactic Acid

Version 2.0

Revision Date: 24.07.2017

2.2 Contributing scenario controlling worker exposure for: PROC5, PROC7, PROC8a, PROC8b, PROC10, PROC11: Mixing or blending in batch processes for formulation of preparations and articles (multistage and/ or significant contact), Industrial spraying, Transfer of substance or preparation (charging/ discharging) from/ to vessels/ large containers at non-dedicated facilities, Transfer of substance or preparation (charging/ discharging) from/ to vessels/ large containers at dedicated facilities, Roller application or brushing, Non industrial spraying

Product (article) characteristic

Remarks : Covers the percentage of the substance in the product up to 100 % (unless stated differently).

Technical conditions and measures

Ensure adequate ventilation, especially in confined areas. Avoid temperatures above 200°C.

Organisational measures to prevent /limit releases, dispersion and exposure

Do not eat, drink or smoke when using this product. Avoid skin contact. Remove and wash contaminated clothing before re-use.

Conditions and measures related to personal protection, hygiene and health evaluation

Breathing apparatus only if aerosol or dust is formed.

Rubber gloves

Face-shield

Boots

Chemical resistant apron

Long sleeved clothing

Note

Local effects

Risk Management Measures are based on qualitative risk characterisation.

3. Exposure estimation and reference to its source

Environment

Contributing Scenario	Exposure Assessment Method	Specific conditions	Compartment	Value	Level of Exposure	RCR
	Qualitative approach used		All compartments			

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

L(+)-Lactic Acid

Version 2.0

Revision Date: 24.07.2017

	to conclude safe use.					
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Remarks: Environmental exposure assessment for this scenario is not relevant.
No hazard to the environment.

Workers

Contributing Scenario	Exposure As- sessment Method	Specific conditions	Value	Level of Expo- sure	RCR
All PROCs	Qualitative ap- proach used to conclude safe use.				

All PROCs : All PROCs mentioned in section 1.

4. Guidance to Downstream User to evaluate whether he works inside the boundaries set by the Exposure Scenario

The immediate downstream user is required to evaluate whether the operational conditions and risk management measures described in the exposure scenario fit to his use.
If other OC/RMM are adopted, the user should ensure that risks are managed to at least equivalent levels.

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

L(+)-Lactic Acid

Version 2.0

Revision Date: 24.07.2017

1. Short title of Exposure Scenario: (Ref.: 6) Manufacture of pulp, paper and paper products

Main User Groups : SU 3: Industrial uses: Uses of substances as such or in preparations at industrial sites

Sectors of end-use : SU6b: Manufacture of pulp, paper and paper products

Process categories : PROC4: Use in batch and other process (synthesis) where opportunity for exposure arises

Environmental Release Categories : ERC1: Manufacture of substances

2.1 Contributing scenario controlling environmental exposure for: ERC1: Manufacture of substances

Product characteristics

Concentration of the Substance in Mixture/Article : Covers the percentage of the substance in the product up to 100 % (unless stated differently).

Amount used

EU tonnage : 58000 t/a

Technical conditions and measures / Organizational measures

Remarks : No RMMs applicable. No hazard to the environment. Environmental exposure assessment for this scenario is not relevant.

2.2 Contributing scenario controlling worker exposure for: PROC4: Use in batch and other process (synthesis) where opportunity for exposure arises

Product characteristics

Concentration of the Substance in Mixture/Article : Covers the percentage of the substance in the product up to 100 % (unless stated differently).

Technical conditions and measures

Ensure adequate ventilation, especially in confined areas. Avoid temperatures above 200°C.

Organisational measures to prevent /limit releases, dispersion and exposure

Do not eat, drink or smoke when using this product. Avoid skin contact. Remove and wash contaminated

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

L(+)-Lactic Acid

Version 2.0

Revision Date: 24.07.2017

clothing before re-use.

Conditions and measures related to personal protection, hygiene and health evaluation

Breathing apparatus only if aerosol or dust is formed.

Rubber gloves

Face-shield

Boots

Chemical resistant apron

Long sleeved clothing

Note

Local effects

Risk Management Measures are based on qualitative risk characterisation.

3. Exposure estimation and reference to its source

Environment

Contributing Scenario	Exposure Assessment Method	Specific conditions	Compartment	Value	Level of Exposure	RCR
	Qualitative approach used to conclude safe use.		All compartments			

Remarks: Environmental exposure assessment for this scenario is not relevant.
No hazard to the environment.

Workers

Contributing Scenario	Exposure Assessment Method	Specific conditions	Value	Level of Exposure	RCR
All PROCs	Qualitative approach used to conclude safe use.				

All PROCs : All PROCs mentioned in section 1.

4. Guidance to Downstream User to evaluate whether he works inside the boundaries set by the Exposure Scenario

The immediate downstream user is required to evaluate whether the operational conditions and risk management measures described in the exposure scenario fit to his use.

If other OC/RMM are adopted, the user should ensure that risks are managed to at least equivalent levels.

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

L(+)-Lactic Acid

Version 2.0

Revision Date: 24.07.2017

1. Short title of Exposure Scenario: (Ref.: 7) Manufacture of bulk, large scale chemicals
(including petroleum products)

- | | |
|----------------------------------|---|
| Main User Groups | : SU 3: Industrial uses: Uses of substances as such or in preparations at industrial sites |
| Sectors of end-use | : SU8: Manufacture of bulk, large scale chemicals (including petroleum products)
SU 3: Industrial uses: Uses of substances as such or in preparations at industrial sites |
| Chemical product category | : PC9a: Coatings and paints, thinners, paint removers
PC15: Non-metal-surface treatment products
PC19: Intermediate
PC20: Products such as pH-regulators, flocculants, precipitants, neutralization agents
PC21: Laboratory chemicals
PC35: Washing and cleaning products (including solvent based products) |
| Process categories | : PROC3: Use in closed batch process (synthesis or formulation)
PROC4: Use in batch and other process (synthesis) where opportunity for exposure arises
PROC5: Mixing or blending in batch processes for formulation of preparations and articles (multistage and/ or significant contact)
PROC8a: Transfer of substance or preparation (charging/ discharging) from/ to vessels/ large containers at non-dedicated facilities
PROC8b: Transfer of substance or preparation (charging/ discharging) from/ to vessels/ large containers at dedicated facilities
PROC9: Transfer of substance or preparation into small containers (dedicated filling line, including weighing)
PROC15: Use as laboratory reagent |
| Environmental Release Categories | : ERC2: Formulation of preparations
ERC4: Industrial use of processing aids in processes and products, not becoming part of articles
ERC6a: Industrial use resulting in manufacture of another substance (use of intermediates)
ERC6b: Industrial use of reactive processing aids
ERC9a: Wide dispersive indoor use of substances in closed systems |

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

L(+)-Lactic Acid

Version 2.0

Revision Date: 24.07.2017

2.1 Contributing scenario controlling environmental exposure for: ERC2, ERC4, ERC6a, ERC6b, ERC9a: Formulation of preparations, Industrial use of processing aids in processes and products, not becoming part of articles, Industrial use resulting in manufacture of another substance (use of intermediates), Industrial use of reactive processing aids, Wide dispersive indoor use of substances in closed systems

Product characteristics

Concentration of the Substance in Mixture/Article : Covers the percentage of the substance in the product up to 100 % (unless stated differently).

Amount used

EU tonnage : 58000 t/a

Technical conditions and measures / Organizational measures

Remarks : No RMMs applicable. No hazard to the environment. Environmental exposure assessment for this scenario is not relevant.

2.2 Contributing scenario controlling worker exposure for: PROC3, PROC4, PROC5, PROC8a, PROC8b, PROC9, PROC15: Use in closed batch process (synthesis or formulation), Use in batch and other process (synthesis) where opportunity for exposure arises, Mixing or blending in batch processes for formulation of preparations and articles (multi-stage and/ or significant contact), Transfer of substance or preparation (charging/ discharging) from/ to vessels/ large containers at non-dedicated facilities, Transfer of substance or preparation (charging/ discharging) from/ to vessels/ large containers at dedicated facilities, Transfer of substance or preparation into small containers (dedicated filling line, including weighing), Use as laboratory reagent

Product characteristics

Concentration of the Substance in Mixture/Article : Covers the percentage of the substance in the product up to 100 % (unless stated differently).

Technical conditions and measures

Ensure adequate ventilation, especially in confined areas. Avoid temperatures above 200°C.

Organisational measures to prevent /limit releases, dispersion and exposure

Do not eat, drink or smoke when using this product. Avoid skin contact. Remove and wash contaminated clothing before re-use.

Conditions and measures related to personal protection, hygiene and health evaluation

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

L(+)-Lactic Acid

Version 2.0

Revision Date: 24.07.2017

Breathing apparatus only if aerosol or dust is formed.

Rubber gloves

Face-shield

Boots

Chemical resistant apron

Long sleeved clothing

Note

Local effects

Risk Management Measures are based on qualitative risk characterisation.

3. Exposure estimation and reference to its source

Environment

Contributing Scenario	Exposure Assessment Method	Specific conditions	Compartment	Value	Level of Exposure	RCR
	Qualitative approach used to conclude safe use.		All compartments			

Remarks: Environmental exposure assessment for this scenario is not relevant.
No hazard to the environment.

Workers

Contributing Scenario	Exposure Assessment Method	Specific conditions	Value	Level of Exposure	RCR
All PROCs	Qualitative approach used to conclude safe use.				

All PROCs : All PROCs mentioned in section 1.

4. Guidance to Downstream User to evaluate whether he works inside the boundaries set by the Exposure Scenario

The immediate downstream user is required to evaluate whether the operational conditions and risk management measures described in the exposure scenario fit to his use.
If other OC/RMM are adopted, the user should ensure that risks are managed to at least equivalent levels.

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

L(+)-Lactic Acid

Version 2.0

Revision Date: 24.07.2017

1. Short title of Exposure Scenario: (Ref.: 8) Manufacture of fine chemicals

Main User Groups	: SU 3: Industrial uses: Uses of substances as such or in preparations at industrial sites
Sectors of end-use	: SU9: Manufacture of fine chemicals SU 3: Industrial uses: Uses of substances as such or in preparations at industrial sites
Chemical product category	: PC9a: Coatings and paints, thinners, paint removers PC15: Non-metal-surface treatment products PC19: Intermediate PC20: Products such as pH-regulators, flocculants, precipitants, neutralization agents PC21: Laboratory chemicals PC35: Washing and cleaning products (including solvent based products) PC37: Water treatment chemicals
Process categories	: PROC1: Use in closed process, no likelihood of exposure PROC2: Use in closed, continuous process with occasional controlled exposure PROC3: Use in closed batch process (synthesis or formulation) PROC4: Use in batch and other process (synthesis) where opportunity for exposure arises PROC5: Mixing or blending in batch processes for formulation of preparations and articles (multistage and/ or significant contact) PROC6: Calendaring operations PROC8a: Transfer of substance or preparation (charging/ discharging) from/ to vessels/ large containers at non-dedicated facilities PROC8b: Transfer of substance or preparation (charging/ discharging) from/ to vessels/ large containers at dedicated facilities PROC9: Transfer of substance or preparation into small containers (dedicated filling line, including weighing) PROC15: Use as laboratory reagent PROC21: Low energy manipulation of substances bound in materials and/ or articles PROC26: Handling of solid inorganic substances at ambient temperature
Environmental Release Categories	: ERC2: Formulation of preparations ERC4: Industrial use of processing aids in processes and products, not becoming part of articles ERC6a: Industrial use resulting in manufacture of another substance (use of intermediates) ERC6b: Industrial use of reactive processing aids ERC6d: Industrial use of process regulators for polymerisation processes in production of resins, rubbers, polymers ERC9a: Wide dispersive indoor use of substances in closed systems

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

L(+)-Lactic Acid

Version 2.0

Revision Date: 24.07.2017

2.1 Contributing scenario controlling environmental exposure for: ERC2, ERC4, ERC6a, ERC6b, ERC6d, ERC9a: Formulation of preparations, Industrial use of processing aids in processes and products, not becoming part of articles, Industrial use resulting in manufacture of another substance (use of intermediates), Industrial use of reactive processing aids, Industrial use of process regulators for polymerisation processes in production of resins, rubbers, polymers, Wide dispersive indoor use of substances in closed systems

Product characteristics

Concentration of the Substance in Mixture/Article : Covers the percentage of the substance in the product up to 100 % (unless stated differently).

Amount used

EU tonnage : 58000 t/a

Technical conditions and measures / Organizational measures

Remarks : No RMMs applicable. No hazard to the environment. Environmental exposure assessment for this scenario is not relevant.

2.2 Contributing scenario controlling worker exposure for: PROC1, PROC2, PROC3, PROC4, PROC5, PROC6, PROC8a, PROC8b, PROC9, PROC15, PROC21, PROC26: Use in closed process, no likelihood of exposure, Use in controlled exposure, Use in closed batch process in batch and other process (synthesis) where opportunity for exposure arises, Mixing or blending in batch processes for formulation of preparations and articles (multistage and/or significant contact), Transfer of substance or preparation (charging/ discharging) from/ to vessels/ large containers at non-dedicated facilities, Transfer of substance or preparation (charging/ discharging) from/ to vessels/ large containers at dedicated facilities, Transfer of substance or preparation into small containers (dedicated filling line, including weighing), Use as laboratory reagent, Low energy manipulation of substances bound in materials and/or articles, Handling of solid inorganic substances at ambient temperature

Product characteristics

Concentration of the Substance in Mixture/Article : Covers the percentage of the substance in the product up to 100 % (unless stated differently).

Technical conditions and measures

Ensure adequate ventilation, especially in confined areas. Avoid temperatures above 200°C.

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

L(+)-Lactic Acid

Version 2.0

Revision Date: 24.07.2017

Organisational measures to prevent /limit releases, dispersion and exposure

Do not eat, drink or smoke when using this product. Avoid skin contact. Remove and wash contaminated clothing before re-use.

Conditions and measures related to personal protection, hygiene and health evaluation

Breathing apparatus only if aerosol or dust is formed.

Rubber gloves

Face-shield

Boots

Chemical resistant apron

Long sleeved clothing

Note

Local effects

Risk Management Measures are based on qualitative risk characterisation.

3. Exposure estimation and reference to its source

Environment

Contributing Scenario	Exposure Assessment Method	Specific conditions	Compartment	Value	Level of Exposure	RCR
	Qualitative approach used to conclude safe use.		All compartments			

Remarks: Environmental exposure assessment for this scenario is not relevant.
No hazard to the environment.

Workers

Contributing Scenario	Exposure Assessment Method	Specific conditions	Value	Level of Exposure	RCR
All PROCs	Qualitative approach used to conclude safe use.				

All PROCs : All PROCs mentioned in section 1.

4. Guidance to Downstream User to evaluate whether he works inside the boundaries set by the Exposure Scenario

The immediate downstream user is required to evaluate

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

L(+)-Lactic Acid

Version 2.0

Revision Date: 24.07.2017

whether the operational conditions and risk management measures described in the exposure scenario fit to his use.

If other OC/RMM are adopted, the user should ensure that risks are managed to at least equivalent levels.

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

L(+)-Lactic Acid

Version 2.0

Revision Date: 24.07.2017

1. Short title of Exposure Scenario: (Ref.: 9) Manufacture of plastics products, including compounding and conversion

Main User Groups : SU 3: Industrial uses: Uses of substances as such or in preparations at industrial sites

Sectors of end-use : SU 3: Industrial uses: Uses of substances as such or in preparations at industrial sites

Chemical product category : PC32: Polymer preparations and compounds

Process categories : PROC5: Mixing or blending in batch processes for formulation of preparations and articles (multistage and/ or significant contact)

Article categories : AC13: Plastic articles

Environmental Release Categories : ERC6c: Industrial use of monomers for manufacture of thermoplastics

2.1 Contributing scenario controlling environmental exposure for: ERC6c: Industrial use of monomers for manufacture of thermoplastics

Product characteristics

Concentration of the Substance in Mixture/Article : Covers the percentage of the substance in the product up to 100 % (unless stated differently).

Amount used
EU tonnage : 58000 t/a

Technical conditions and measures / Organizational measures

Remarks : No RMMs applicable. No hazard to the environment. Environmental exposure assessment for this scenario is not relevant.

2.2 Contributing scenario controlling worker exposure for: PROC5: Mixing or blending in batch processes for formulation of preparations and articles (multistage and/ or significant contact)

Product (article) characteristic

Remarks : Covers the percentage of the substance in the product up to 100 % (unless stated differently).

Technical conditions and measures

Ensure adequate ventilation, especially in confined areas. Avoid temperatures above 200°C.

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

L(+)-Lactic Acid

Version 2.0

Revision Date: 24.07.2017

Organisational measures to prevent /limit releases, dispersion and exposure

Do not eat, drink or smoke when using this product. Avoid skin contact. Remove and wash contaminated clothing before re-use.

Conditions and measures related to personal protection, hygiene and health evaluation

Breathing apparatus only if aerosol or dust is formed.

Rubber gloves

Face-shield

Boots

Chemical resistant apron

Long sleeved clothing

Note

Local effects

Risk Management Measures are based on qualitative risk characterisation.

3. Exposure estimation and reference to its source

Environment

Contributing Scenario	Exposure Assessment Method	Specific conditions	Compartment	Value	Level of Exposure	RCR
	Qualitative approach used to conclude safe use.		All compartments			

Remarks: Environmental exposure assessment for this scenario is not relevant.
No hazard to the environment.

Workers

Contributing Scenario	Exposure Assessment Method	Specific conditions	Value	Level of Exposure	RCR
All PROCs	Qualitative approach used to conclude safe use.				

All PROCs : All PROCs mentioned in section 1.

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

L(+)-Lactic Acid

Version 2.0

Revision Date: 24.07.2017

4. Guidance to Downstream User to evaluate whether he works inside the boundaries set by the Exposure Scenario

The immediate downstream user is required to evaluate whether the operational conditions and risk management measures described in the exposure scenario fit to his use.
If other OC/RMM are adopted, the user should ensure that risks are managed to at least equivalent levels.

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

L(+)-Lactic Acid

Version 2.0

Revision Date: 24.07.2017

1. Short title of Exposure Scenario: (Ref.: 10) Building and construction work

Main User Groups : SU 3: Industrial uses: Uses of substances as such or in preparations at industrial sites

Sectors of end-use : SU19: Building and construction work

Chemical product category : PC0: Other: building and construction preparations

Process categories : PROC9: Transfer of substance or preparation into small containers (dedicated filling line, including weighing)

Environmental Release Categories : ERC5: Industrial use resulting in inclusion into or onto a matrix

2.1 Contributing scenario controlling environmental exposure for: ERC5: Industrial use resulting in inclusion into or onto a matrix

Product characteristics

Concentration of the Substance in Mixture/Article : Covers the percentage of the substance in the product up to 100 % (unless stated differently).

Amount used

EU tonnage : 58000 t/a

Technical conditions and measures / Organizational measures

Remarks : No RMMs applicable. No hazard to the environment. Environmental exposure assessment for this scenario is not relevant.

2.2 Contributing scenario controlling worker exposure for: PROC9: Transfer of substance or preparation into small containers (dedicated filling line, including weighing)

Product characteristics

Concentration of the Substance in Mixture/Article : Covers the percentage of the substance in the product up to 100 % (unless stated differently).

Technical conditions and measures

Ensure adequate ventilation, especially in confined areas. Avoid temperatures above 200°C.

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

L(+)-Lactic Acid

Version 2.0

Revision Date: 24.07.2017

Organisational measures to prevent /limit releases, dispersion and exposure
Do not eat, drink or smoke when using this product. Avoid skin contact. Remove and wash contaminated clothing before re-use.

Conditions and measures related to personal protection, hygiene and health evaluation
Breathing apparatus only if aerosol or dust is formed.
Rubber gloves
Face-shield
Boots
Chemical resistant apron
Long sleeved clothing

Note

Local effects
Risk Management Measures are based on qualitative risk characterisation.

3. Exposure estimation and reference to its source

Environment

Contributing Scenario	Exposure Assessment Method	Specific conditions	Compartment	Value	Level of Exposure	RCR
	Qualitative approach used to conclude safe use.		All compartments			

Remarks: Environmental exposure assessment for this scenario is not relevant.
No hazard to the environment.

Workers

Contributing Scenario	Exposure Assessment Method	Specific conditions	Value	Level of Exposure	RCR
All PROCs	Qualitative approach used to conclude safe use.				

All PROCs : All PROCs mentioned in section 1.

4. Guidance to Downstream User to evaluate whether he works inside the boundaries set by the Exposure Scenario

The immediate downstream user is required to evaluate whether the operational conditions and risk management measures described in the exposure scenario fit to his use.
If other OC/RMM are adopted, the user should ensure that risks are managed to at least equivalent levels.

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

L(+)-Lactic Acid

Version 2.0

Revision Date: 24.07.2017

1. Short title of Exposure Scenario: (Ref.: 11) Health services

Main User Groups	: SU 22: Professional uses: Public domain (administration, education, entertainment, services, craftsmen)
Sectors of end-use	: SU20: Health services
Chemical product category	: PC19: Intermediate PC21: Laboratory chemicals
Process categories	: PROC9: Transfer of substance or preparation into small containers (dedicated filling line, including weighing) PROC15: Use as laboratory reagent

2.2 Contributing scenario controlling worker exposure for: PROC9, PROC15: Transfer of substance or preparation into small containers (dedicated filling line, including weighing), Use as laboratory reagent

Product characteristics

Concentration of the Substance in Mixture/Article : Covers the percentage of the substance in the product up to 100 % (unless stated differently).

Technical conditions and measures

Ensure adequate ventilation, especially in confined areas. Avoid temperatures above 200°C.

Organisational measures to prevent /limit releases, dispersion and exposure

Do not eat, drink or smoke when using this product. Avoid skin contact. Remove and wash contaminated clothing before re-use.

Conditions and measures related to personal protection, hygiene and health evaluation

Breathing apparatus only if aerosol or dust is formed.

Rubber gloves

Face-shield

Boots

Chemical resistant apron

Long sleeved clothing

Note

Local effects

Risk Management Measures are based on qualitative risk characterisation.

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

L(+)-Lactic Acid

Version 2.0

Revision Date: 24.07.2017

3. Exposure estimation and reference to its source

Workers

Contributing Scenario	Exposure Assessment Method	Specific conditions	Value	Level of Exposure	RCR
All PROCs	Qualitative approach used to conclude safe use.				

All PROCs : All PROCs mentioned in section 1.

4. Guidance to Downstream User to evaluate whether he works inside the boundaries set by the Exposure Scenario

The immediate downstream user is required to evaluate whether the operational conditions and risk management measures described in the exposure scenario fit to his use.

If other OC/RMM are adopted, the user should ensure that risks are managed to at least equivalent levels.

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

L(+)-Lactic Acid

Version 2.0

Revision Date: 24.07.2017

1. Short title of Exposure Scenario: (Ref.: 12) Formulation of preparations and/or re-packaging, without relevant subsequent service life

Main User Groups	: SU 3: Industrial uses: Uses of substances as such or in preparations at industrial sites
Sectors of end-use	: SU 10: Formulation [mixing] of preparations and/ or re-packaging (excluding alloys) SU 3: Industrial uses: Uses of substances as such or in preparations at industrial sites SU 22: Professional uses: Public domain (administration, education, entertainment, services, craftsmen)
Chemical product category	: PC4: Anti-Freeze and de-icing products PC8: Biocidal products (e.g. Disinfectants, pest control) PC9a: Coatings and paints, thinners, paint removers PC14: Metal surface treatment products, including galvanic and electroplating products PC15: Non-metal-surface treatment products PC17: Hydraulic fluids PC19: Intermediate PC20: Products such as pH-regulators, flocculants, precipitants, neutralization agents PC21: Laboratory chemicals PC24: Lubricants, greases, release products PC25: Metal working fluids PC28: Perfumes, fragrances PC29: Pharmaceuticals PC31: Polishes and wax blends PC35: Washing and cleaning products (including solvent based products) PC37: Water treatment chemicals PC38: Welding and soldering products (with flux coatings or flux cores.), flux products PC39: Cosmetics, personal care products
Process categories	: PROC1: Use in closed process, no likelihood of exposure PROC2: Use in closed, continuous process with occasional controlled exposure PROC3: Use in closed batch process (synthesis or formulation) PROC4: Use in batch and other process (synthesis) where opportunity for exposure arises PROC5: Mixing or blending in batch processes for formulation of preparations and articles (multistage and/ or significant contact) PROC7: Industrial spraying PROC8a: Transfer of substance or preparation (charging/ discharging) from/ to vessels/ large containers at non-dedicated facilities PROC8b: Transfer of substance or preparation (charging/ discharging) from/ to vessels/ large containers at dedicated facilities PROC9: Transfer of substance or preparation into small con-

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

L(+)-Lactic Acid

Version 2.0

Revision Date: 24.07.2017

ainers (dedicated filling line, including weighing)
PROC10: Roller application or brushing
PROC11: Non industrial spraying
PROC14: Production of preparations or articles by tableting, compression, extrusion, pelletisation
PROC15: Use as laboratory reagent
PROC18: Greasing at high energy conditions
PROC19: Hand-mixing with intimate contact and only PPE available
PROC26: Handling of solid inorganic substances at ambient temperature

Environmental Release Categories : ERC2: Formulation of preparations
ERC4: Industrial use of processing aids in processes and products, not becoming part of articles
ERC5: Industrial use resulting in inclusion into or onto a matrix
ERC6a: Industrial use resulting in manufacture of another substance (use of intermediates)
ERC6b: Industrial use of reactive processing aids
ERC7: Industrial use of substances in closed systems
ERC8a: Wide dispersive indoor use of processing aids in open systems
ERC9a: Wide dispersive indoor use of substances in closed systems

2.1 Contributing scenario controlling environmental exposure for: ERC2, ERC4, ERC5, ERC6a, ERC6b, ERC7, ERC8a, ERC9a: Formulation of preparations, Industrial use of processing aids in processes and products, not becoming part of articles, Industrial use resulting in inclusion into or onto a matrix, Industrial use resulting in manufacture of another substance (use of intermediates), Industrial use of reactive processing aids, Industrial use of substances in closed systems, Wide dispersive indoor use of processing aids in open systems, Wide dispersive indoor use of substances in closed systems

Product characteristics

Concentration of the Substance in Mixture/Article : Covers the percentage of the substance in the product up to 100 % (unless stated differently).

Amount used

EU tonnage : 58000 t/a

Technical conditions and measures / Organizational measures

Remarks : No RMMs applicable. No hazard to the environment. Environmental exposure assessment for this scenario is not relevant.

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

L(+)-Lactic Acid

Version 2.0

Revision Date: 24.07.2017

2.2 Contributing scenario controlling worker exposure for: PROC1, PROC2, PROC3, PROC4, PROC5, PROC7, PROC8a, PROC8b, PROC9, PROC10, PROC11, PROC14, PROC15, PROC18, PROC19, PROC26: Use in closed process, no likelihood of exposure, Use in closed, continuous process with occasional controlled exposure, Use in closed batch process (synthesis or formulation), Use in batch and other process (synthesis) where opportunity for exposure arises, Mixing or blending in batch processes for formulation of preparations and articles (multistage and / or significant contact), Industrial spraying, Transfer of substance or preparation (charging/ discharging) from/ to vessels/ large containers at non-dedicated facilities, Transfer of substance or preparation (charging/ discharging) from/ to vessels/ large container substance or preparation into small containers (dedicated filling line, including weighing), Roller application or brushing, Non industrial spraying, Production of preparations or articles by tableting, compression, extrusion, pelletisation, Use as laboratory reagent, Greasing at high energy conditions, Hand-mixing with intimate contact and only PPE available, Handling of solid inorganic substances at ambient temperature

Product characteristics

Concentration of the Substance in Mixture/Article : Covers the percentage of the substance in the product up to 100 % (unless stated differently).

Technical conditions and measures

Ensure adequate ventilation, especially in confined areas. Avoid temperatures above 200°C.

Organisational measures to prevent /limit releases, dispersion and exposure

Do not eat, drink or smoke when using this product. Avoid skin contact. Remove and wash contaminated clothing before re-use.

Conditions and measures related to personal protection, hygiene and health evaluation

Breathing apparatus only if aerosol or dust is formed.

Rubber gloves

Face-shield

Boots

Chemical resistant apron

Long sleeved clothing

Note

Local effects

Risk Management Measures are based on qualitative risk characterisation.

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

L(+)-Lactic Acid

Version 2.0

Revision Date: 24.07.2017

3. Exposure estimation and reference to its source

Environment

Contributing Scenario	Exposure Assessment Method	Specific conditions	Compartment	Value	Level of Exposure	RCR
	Qualitative approach used to conclude safe use.		All compartments			

Remarks: Environmental exposure assessment for this scenario is not relevant.
No hazard to the environment.

Workers

Contributing Scenario	Exposure Assessment Method	Specific conditions	Value	Level of Exposure	RCR
All PROCs	Qualitative approach used to conclude safe use.				

All PROCs : All PROCs mentioned in section 1.

4. Guidance to Downstream User to evaluate whether he works inside the boundaries set by the Exposure Scenario

The immediate downstream user is required to evaluate whether the operational conditions and risk management measures described in the exposure scenario fit to his use.
If other OC/RMM are adopted, the user should ensure that risks are managed to at least equivalent levels.

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

L(+)-Lactic Acid

Version 2.0

Revision Date: 24.07.2017

1. Short title of Exposure Scenario: (Ref.: 13) Formulation of preparations and/or re-packaging, with relevant subsequent service life

Main User Groups	: SU 3: Industrial uses: Uses of substances as such or in preparations at industrial sites
Sectors of end-use	: SU 3: Industrial uses: Uses of substances as such or in preparations at industrial sites SU 10: Formulation [mixing] of preparations and/ or re-packaging (excluding alloys) SU 22: Professional uses: Public domain (administration, education, entertainment, services, craftsmen)
Chemical product category	: PC9a: Coatings and paints, thinners, paint removers PC9c: Finger paints PC9b: Fillers, putties, plasters, modelling clay PC35: Washing and cleaning products (including solvent based products)
Process categories	: PROC5: Mixing or blending in batch processes for formulation of preparations and articles (multistage and/ or significant contact) PROC7: Industrial spraying PROC8a: Transfer of substance or preparation (charging/ discharging) from/ to vessels/ large containers at non-dedicated facilities PROC8b: Transfer of substance or preparation (charging/ discharging) from/ to vessels/ large containers at dedicated facilities PROC10: Roller application or brushing PROC11: Non industrial spraying
Article categories	: AC1: Vehicles
Environmental Release Categories	: ERC4: Industrial use of processing aids in processes and products, not becoming part of articles ERC5: Industrial use resulting in inclusion into or onto a matrix

2.1 Contributing scenario controlling environmental exposure for: ERC4, ERC5: Industrial use of processing aids in processes and products, not becoming part of articles, Industrial use resulting in inclusion into or onto a matrix

Product characteristics	
Concentration of the Substance in Mixture/Article	: Covers the percentage of the substance in the product up to 100 % (unless stated differently).
Amount used	
EU tonnage	: 58000 t/a

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

L(+)-Lactic Acid

Version 2.0

Revision Date: 24.07.2017

Technical conditions and measures / Organizational measures

Remarks : No RMMs applicable. No hazard to the environment. Environmental exposure assessment for this scenario is not relevant.

2.2 Contributing scenario controlling worker exposure for: PROC5, PROC7, PROC8a, PROC8b, PROC10, PROC11: Mixing or blending in batch processes for formulation of preparations and articles (multistage and/ or significant contact), Industrial spraying, Transfer of substance or preparation (charging/ discharging) from/ to vessels/ large containers at non-dedicated facilities, Transfer of substance or preparation (charging/ discharging) from/ to vessels/ large containers at dedicated facilities, Roller application or brushing, Non industrial spraying

Product (article) characteristic

Remarks : Covers the percentage of the substance in the product up to 100 % (unless stated differently).

Technical conditions and measures

Ensure adequate ventilation, especially in confined areas. Avoid temperatures above 200°C.

Organisational measures to prevent /limit releases, dispersion and exposure

Do not eat, drink or smoke when using this product. Avoid skin contact. Remove and wash contaminated clothing before re-use.

Conditions and measures related to personal protection, hygiene and health evaluation

Breathing apparatus only if aerosol or dust is formed.

Rubber gloves

Face-shield

Boots

Chemical resistant apron

Long sleeved clothing

Note

Local effects

Risk Management Measures are based on qualitative risk characterisation.

3. Exposure estimation and reference to its source

Environment

Contributing	Exposure As-	Specific	Compartment	Value	Level of	RCR	

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

L(+)-Lactic Acid

Version 2.0

Revision Date: 24.07.2017

Scenario	Assessment Method	Conditions			Exposure	
	Qualitative approach used to conclude safe use.		All compartments			
Remarks: Environmental exposure assessment for this scenario is not relevant. No hazard to the environment.						

Workers

Contributing Scenario	Exposure Assessment Method	Specific conditions	Value	Level of Exposure	RCR
All PROCs	Qualitative approach used to conclude safe use.				

All PROCs : All PROCs mentioned in section 1.

4. Guidance to Downstream User to evaluate whether he works inside the boundaries set by the Exposure Scenario

The immediate downstream user is required to evaluate whether the operational conditions and risk management measures described in the exposure scenario fit to his use.
If other OC/RMM are adopted, the user should ensure that risks are managed to at least equivalent levels.

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

L(+)-Lactic Acid

Version 2.0

Revision Date: 24.07.2017

1. Short title of Exposure Scenario: (Ref.: 14) Manufacture of food products, without relevant subsequent service life

- Main User Groups : SU 3: Industrial uses: Uses of substances as such or in preparations at industrial sites
- Sectors of end-use : SU4: Manufacture of food products
- Chemical product category : PC0: Other: not specified
PC2: Adsorbents
PC20: Products such as pH-regulators, flocculants, precipitants, neutralization agents
PC36: Water softeners
PC37: Water treatment chemicals
- Process categories : PROC3: Use in closed batch process (synthesis or formulation)
PROC4: Use in batch and other process (synthesis) where opportunity for exposure arises
PROC5: Mixing or blending in batch processes for formulation of preparations and articles (multistage and/ or significant contact)
PROC0: Other Process or activity
- Environmental Release Categories : ERC2: Formulation of preparations
ERC5: Industrial use resulting in inclusion into or onto a matrix
ERC6a: Industrial use resulting in manufacture of another substance (use of intermediates)

2.1 Contributing scenario controlling environmental exposure for: ERC2, ERC5, ERC6a:
Formulation of preparations, Industrial use resulting in inclusion into or onto a matrix,
Industrial use resulting in manufacture of another substance (use of intermediates)

Product characteristics

Concentration of the Substance in Mixture/Article : Covers the percentage of the substance in the product up to 100 % (unless stated differently).

Amount used

EU tonnage : 58000 t/a

Technical conditions and measures / Organizational measures

Remarks : No RMMs applicable. No hazard to the environment. Environmental exposure assessment for this scenario is not relevant.

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

L(+)-Lactic Acid

Version 2.0

Revision Date: 24.07.2017

2.2 Contributing scenario controlling worker exposure
PROC5: Other Process or activity, Use in closed batch
(batch process (synthesis or formula-
tion), Use in batch and other process (synthesis) w
here opportunity for exposure arises,
Mixing or blending in batch processes for formulati
on of preparations and articles (multi-
stage and/ or significant contact)

re for: PROC0, PROC3, PROC4,
ch process (synthesis or formula-
here opportunity for exposure arises,
on of preparations and articles (multi-

Product characteristics

Concentration of the Substance in Mixture/Article : Covers the percentage of the substance in the product up to 100 % (unless stated differently).

Technical conditions and measures

Ensure adequate ventilation, especially in confined areas. Avoid temperatures above 200°C.

Organisational measures to prevent /limit releases, dispersion and exposure

Do not eat, drink or smoke when using this product. Avoid skin contact. Remove and wash contaminated clothing before re-use.

Conditions and measures related to personal protection, hygiene and health evaluation

Breathing apparatus only if aerosol or dust is formed.

Rubber gloves

Face-shield

Boots

Chemical resistant apron

Long sleeved clothing

Note

Local effects

Risk Management Measures are based on qualitative risk characterisation.

3. Exposure estimation and reference to its source

Environment

Contributing Scenario	Exposure Assessment Method	Specific conditions	Compartment	Value	Level of Exposure	RCR
	Qualitative approach used to conclude safe use.		All compartments			

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

L(+)-Lactic Acid

Version 2.0

Revision Date: 24.07.2017

Remarks: Environmental exposure assessment for this scenario is not relevant.
No hazard to the environment.

Workers

Contributing Scenario	Exposure Assessment Method	Specific conditions	Value	Level of Exposure	RCR
All PROCs	Qualitative approach used to conclude safe use.				

All PROCs : All PROCs mentioned in section 1.

4. Guidance to Downstream User to evaluate whether he works inside the boundaries set by the Exposure Scenario

The immediate downstream user is required to evaluate whether the operational conditions and risk management measures described in the exposure scenario fit to his use.
If other OC/RMM are adopted, the user should ensure that risks are managed to at least equivalent levels.

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

L(+)-Lactic Acid

Version 2.0

Revision Date: 24.07.2017

1. Short title of Exposure Scenario: (Ref.: 15) Manufacture of food products, with relevant subsequent service life

Main User Groups : SU 3: Industrial uses: Uses of substances as such or in preparations at industrial sites

Sectors of end-use : SU4: Manufacture of food products

Chemical product category : PC0: Other: not specified

Process categories : PROC5: Mixing or blending in batch processes for formulation of preparations and articles (multistage and/ or significant contact)

Article categories : AC 0: Other Articles

Environmental Release Categories : ERC3: Formulation in materials

2.1 Contributing scenario controlling environmental exposure for: ERC3: Formulation in materials

Product characteristics

Concentration of the Substance in Mixture/Article : Covers the percentage of the substance in the product up to 100 % (unless stated differently).

Amount used

EU tonnage : 58000 t/a

Technical conditions and measures / Organizational measures

Remarks : No RMMs applicable. No hazard to the environment. Environmental exposure assessment for this scenario is not relevant.

2.2 Contributing scenario controlling worker exposure for: PROC5: Mixing or blending in batch processes for formulation of preparations and articles (multistage and/ or significant contact)

Product (article) characteristic

Remarks : Covers the percentage of the substance in the product up to 100 % (unless stated differently).

Technical conditions and measures

Ensure adequate ventilation, especially in confined areas. Avoid temperatures above 200°C.

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

L(+)-Lactic Acid

Version 2.0

Revision Date: 24.07.2017

Organisational measures to prevent /limit releases, dispersion and exposure

Do not eat, drink or smoke when using this product. Avoid skin contact. Remove and wash contaminated clothing before re-use.

Conditions and measures related to personal protection, hygiene and health evaluation

Breathing apparatus only if aerosol or dust is formed.

Rubber gloves

Face-shield

Boots

Chemical resistant apron

Long sleeved clothing

Note

Local effects

Risk Management Measures are based on qualitative risk characterisation.

3. Exposure estimation and reference to its source

Environment

Contributing Scenario	Exposure Assessment Method	Specific conditions	Compartment	Value	Level of Exposure	RCR
	Qualitative approach used to conclude safe use.		All compartments			
Remarks: Environmental exposure assessment for this scenario is not relevant. No hazard to the environment.						

Workers

Contributing Scenario	Exposure Assessment Method	Specific conditions	Value	Level of Exposure	RCR
All PROCs	Qualitative approach used to conclude safe use.				

All PROCs : All PROCs mentioned in section 1.

4. Guidance to Downstream User to evaluate whether he works inside the boundaries set by the Exposure Scenario

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

L(+)-Lactic Acid

Version 2.0

Revision Date: 24.07.2017

The immediate downstream user is required to evaluate whether the operational conditions and risk management measures described in the exposure scenario fit to his use.

If other OC/RMM are adopted, the user should ensure that risks are managed to at least equivalent levels.

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

L(+)-Lactic Acid

Version 2.0

Revision Date: 24.07.2017

1. Short title of Exposure Scenario: (Ref.: 16) Public domain, without relevant subsequent service life

Main User Groups	: SU 22: Professional uses: Public domain (administration, education, entertainment, services, craftsmen)
Sectors of end-use	: SU 22: Professional uses: Public domain (administration, education, entertainment, services, craftsmen)
Chemical product category	: PC12: Fertilizers PC19: Intermediate PC21: Laboratory chemicals PC24: Lubricants, greases, release products PC25: Metal working fluids PC31: Polishes and wax blends PC34: Textile dyes, finishing and impregnating products; including bleaches and other processing aids PC35: Washing and cleaning products (including solvent based products) PC39: Cosmetics, personal care products
Process categories	: PROC1: Use in closed process, no likelihood of exposure PROC2: Use in closed, continuous process with occasional controlled exposure PROC3: Use in closed batch process (synthesis or formulation) PROC4: Use in batch and other process (synthesis) where opportunity for exposure arises PROC5: Mixing or blending in batch processes for formulation of preparations and articles (multistage and/ or significant contact) PROC7: Industrial spraying PROC8a: Transfer of substance or preparation (charging/ discharging) from/ to vessels/ large containers at non-dedicated facilities PROC8b: Transfer of substance or preparation (charging/ discharging) from/ to vessels/ large containers at dedicated facilities PROC9: Transfer of substance or preparation into small containers (dedicated filling line, including weighing) PROC10: Roller application or brushing PROC11: Non industrial spraying PROC13: Treatment of articles by dipping and pouring PROC14: Production of preparations or articles by tableting, compression, extrusion, pelletisation PROC15: Use as laboratory reagent PROC17: Lubrication at high energy conditions and in partly open process PROC19: Hand-mixing with intimate contact and only PPE available PROC20: Heat and pressure transfer fluids in dispersive, professional use but closed systems PROC24: High (mechanical) energy work-up of substances bound in materials and/ or articles

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

L(+)-Lactic Acid

Version 2.0

Revision Date: 24.07.2017

Environmental Release Categories : ERC2: Formulation of preparations
ERC4: Industrial use of processing aids in processes and products, not becoming part of articles
ERC5: Industrial use resulting in inclusion into or onto a matrix
ERC6b: Industrial use of reactive processing aids
ERC7: Industrial use of substances in closed systems
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
ERC8f: Wide dispersive outdoor use resulting in inclusion into or onto a matrix
ERC9a: Wide dispersive indoor use of substances in closed systems
ERC9b: Wide dispersive outdoor use of substances in closed systems

2.1 Contributing scenario controlling environmental exposure for: ERC2, ERC4, ERC5, ERC6b, ERC7, ERC8a, ERC8b, ERC8d, ERC8e, ERC8f, ERC 9a, ERC9b: Formulation of preparations, Industrial use of processing aids in processes and products, not becoming part of articles, Industrial use resulting in inclusion into or onto a matrix, Industrial use of reactive processing aids, Industrial use of substances in closed systems, Wide dispersive indoor use of processing aids in open systems, Wide dispersive indoor use of reactive substances in open systems, Wide dispersive outdoor use of processing aids in open systems, Wide dispersive outdoor use of reactive substances in open systems, Wide dispersive outdoor use resulting in inclusion into or onto a matrix, Wide dispersive indoor use of substances in closed systems, Wide dispersive outdoor use of substances in closed systems

Product characteristics

Concentration of the Substance in Mixture/Article : Covers the percentage of the substance in the product up to 100 % (unless stated differently).

Amount used

EU tonnage : 58000 t/a

Technical conditions and measures / Organizational measures

Remarks : No RMMs applicable. No hazard to the environment. Environmental exposure assessment for this scenario is not relevant.

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

L(+)-Lactic Acid

Version 2.0

Revision Date: 24.07.2017

2.2 Contributing scenario controlling worker exposure for: PROC1, PROC2, PROC3, PROC4, PROC5, PROC7, PROC8a, PROC8b, PROC9, PROC10, PROC11, PROC13, PROC14, PROC15, PROC17, PROC19, PROC20, PROC24: Use in closed process, no likelihood of exposure, Use in closed, continuous process with occasional controlled exposure, Use in closed batch process (synthesis or for formulation of preparations and articles (multistage and/ or significant preparation (charging/ discharging) from/ to vessels/ large containers at non-dedicated facilities, Transfer of substance or preparation into small containers (dedicated filling line, including weighing), Roller application or brushing articles by dipping and pouring, Production of prep compression, extrusion, pelletisation, Use as laboratory reagent, Lubrication at high energy conditions and in partly open process, Hand-mixing with intimate contact and only PPE available, Heat and pressure transfer fluids in dispersive, professional use but closed systems, High (mechanical) energy work-up of substances bound in materials and/ or articles

Product characteristics

Concentration of the Substance in Mixture/Article : Covers the percentage of the substance in the product up to 100 % (unless stated differently).

Technical conditions and measures

Ensure adequate ventilation, especially in confined areas. Avoid temperatures above 200°C.

Organisational measures to prevent /limit releases, dispersion and exposure

Do not eat, drink or smoke when using this product. Avoid skin contact. Remove and wash contaminated clothing before re-use.

Conditions and measures related to personal protection, hygiene and health evaluation

Breathing apparatus only if aerosol or dust is formed.

Rubber gloves

Face-shield

Boots

Chemical resistant apron

Long sleeved clothing

Note

Local effects

Risk Management Measures are based on qualitative risk characterisation.

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

L(+)-Lactic Acid

Version 2.0

Revision Date: 24.07.2017

3. Exposure estimation and reference to its source

Environment

Contributing Scenario	Exposure Assessment Method	Specific conditions	Compartment	Value	Level of Exposure	RCR
	Qualitative approach used to conclude safe use.		All compartments			

Remarks: Environmental exposure assessment for this scenario is not relevant.
No hazard to the environment.

Workers

Contributing Scenario	Exposure Assessment Method	Specific conditions	Value	Level of Exposure	RCR
All PROCs	Qualitative approach used to conclude safe use.				

All PROCs : All PROCs mentioned in section 1.

4. Guidance to Downstream User to evaluate whether he works inside the boundaries set by the Exposure Scenario

The immediate downstream user is required to evaluate whether the operational conditions and risk management measures described in the exposure scenario fit to his use.
If other OC/RMM are adopted, the user should ensure that risks are managed to at least equivalent levels.

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

L(+)-Lactic Acid

Version 2.0

Revision Date: 24.07.2017

1. Short title of Exposure Scenario: (Ref.: 17) Public domain, with relevant subsequent service life

- Main User Groups : SU 22: Professional uses: Public domain (administration, education, entertainment, services, craftsmen)
- Sectors of end-use : SU 22: Professional uses: Public domain (administration, education, entertainment, services, craftsmen)
- Process categories : PROC8a: Transfer of substance or preparation (charging/discharging) from/ to vessels/ large containers at non-dedicated facilities
PROC8b: Transfer of substance or preparation (charging/discharging) from/ to vessels/ large containers at dedicated facilities
PROC10: Roller application or brushing
PROC11: Non industrial spraying
PROC13: Treatment of articles by dipping and pouring
PROC16: Using material as fuel sources, limited exposure to unburned product to be expected
PROC18: Greasing at high energy conditions
PROC19: Hand-mixing with intimate contact and only PPE available
PROC20: Heat and pressure transfer fluids in dispersive, professional use but closed systems
- Environmental Release Categories : ERC8a: Wide dispersive indoor use of processing aids in open systems
ERC8d: Wide dispersive outdoor use of processing aids in open systems
ERC8f: Wide dispersive outdoor use resulting in inclusion into or onto a matrix
ERC9a: Wide dispersive indoor use of substances in closed systems
ERC9b: Wide dispersive outdoor use of substances in closed systems
ERC10b: Wide dispersive outdoor use of long-life articles and materials with high or intended release (including abrasive processing)

2.1 Contributing scenario controlling environmental exposure for: ERC8a, ERC8d, ERC8f, ERC9a, ERC9b, ERC10b: Wide dispersive indoor use of processing aids in open systems, Wide dispersive outdoor use of processing aids in open systems, Wide dispersive outdoor use resulting in inclusion into or onto a matrix, Wide dispersive indoor use of substances in closed systems, Wide dispersive outdoor use of substances in closed systems, Wide dispersive outdoor use of long-life articles and materials with high or intended release (including abrasive processing)

Product characteristics

- Concentration of the Substance in Mixture/Article : Covers the percentage of the substance in the product up to 100 % (unless stated differently).

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

L(+)-Lactic Acid

Version 2.0

Revision Date: 24.07.2017

Amount used

EU tonnage : 58000 t/a

Technical conditions and measures / Organizational measures

Remarks : No RMMs applicable. No hazard to the environment. Environmental exposure assessment for this scenario is not relevant.

2.2 Contributing scenario controlling worker exposure for: PROC8a, PROC8b, PROC10, PROC11, PROC13, PROC16, PROC18, PROC19, PROC20: Transfer of substance or preparation (charging/ discharging) from/ to vessels/ large containers at non-dedicated facilities, Transfer of substance or preparation (charging/ discharging) from/ to vessels/ large containers at dedicated facilities, Roller application or brushing, Non industrial spraying, Treatment of articles by dipping and pouring, Using material as fuel sources, limited exposure to unburned product to be expected, Greasing at high energy conditions, Hand-mixing with intimate contact and only PPE available, Heat and pressure transfer fluids in dispersive, professional use but closed systems

Product characteristics

Concentration of the Substance in Mixture/Article : Covers the percentage of the substance in the product up to 100 % (unless stated differently).

Technical conditions and measures

Ensure adequate ventilation, especially in confined areas. Avoid temperatures above 200°C.

Organisational measures to prevent /limit releases, dispersion and exposure

Do not eat, drink or smoke when using this product. Avoid skin contact. Remove and wash contaminated clothing before re-use.

Conditions and measures related to personal protection, hygiene and health evaluation

Breathing apparatus only if aerosol or dust is formed.

Rubber gloves

Face-shield

Boots

Chemical resistant apron

Long sleeved clothing

Note

Local effects

Risk Management Measures are based on qualitative risk characterisation.

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

L(+)-Lactic Acid

Version 2.0

Revision Date: 24.07.2017

3. Exposure estimation and reference to its source

Environment

Contributing Scenario	Exposure Assessment Method	Specific conditions	Compartment	Value	Level of Exposure	RCR
	Qualitative approach used to conclude safe use.		All compartments			

Remarks: Environmental exposure assessment for this scenario is not relevant.
No hazard to the environment.

Workers

Contributing Scenario	Exposure Assessment Method	Specific conditions	Value	Level of Exposure	RCR
All PROCs	Qualitative approach used to conclude safe use.				

All PROCs : All PROCs mentioned in section 1.

4. Guidance to Downstream User to evaluate whether he works inside the boundaries set by the Exposure Scenario

The immediate downstream user is required to evaluate whether the operational conditions and risk management measures described in the exposure scenario fit to his use.

If other OC/RMM are adopted, the user should ensure that risks are managed to at least equivalent levels.

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

L(+)-Lactic Acid

Version 2.0

Revision Date: 24.07.2017

1. Short title of Exposure Scenario: (Ref.: 18) Private household, without relevant subsequent service life

Main User Groups : SU 21: Consumer uses: Private households (= general public = consumers)

Sectors of end-use : SU 21: Consumer uses: Private households (= general public = consumers)

Chemical product category : PC1: Adhesives, sealants
PC2: Adsorbents
PC3: Air care products
PC4: Anti-Freeze and de-icing products
PC8: Biocidal products (e.g. Disinfectants, pest control)
PC9a: Coatings and paints, thinners, paint removers
PC9b: Fillers, putties, plasters, modelling clay
PC9c: Finger paints
PC12: Fertilizers
PC13: Fuels
PC14: Metal surface treatment products, including galvanic and electroplating products
PC15: Non-metal-surface treatment products
PC17: Hydraulic fluids
PC20: Products such as pH-regulators, flocculants, precipitants, neutralization agents
PC21: Laboratory chemicals
PC24: Lubricants, greases, release products
PC25: Metal working fluids
PC31: Polishes and wax blends
PC32: Polymer preparations and compounds
PC35: Washing and cleaning products (including solvent based products)
PC39: Cosmetics, personal care products

Environmental Release Categories : ERC1: Manufacture of substances
ERC2: Formulation of preparations
ERC4: Industrial use of processing aids in processes and products, not becoming part of articles
ERC8a: Wide dispersive indoor use of processing aids in open systems
ERC8c: Wide dispersive indoor use resulting in inclusion into or onto a matrix
ERC8d: Wide dispersive outdoor use of processing aids in open systems
ERC9a: Wide dispersive indoor use of substances in closed systems

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

L(+)-Lactic Acid

Version 2.0

Revision Date: 24.07.2017

2.1 Contributing scenario controlling environmental exposure for: ERC1, ERC2, ERC4, ERC8a, ERC8c, ERC8d, ERC9a: Manufacture of substances, Formulation of preparations, Industrial use of processing aids in processes and products, not becoming part of articles, Wide dispersive indoor use of processing aids in open systems, Wide dispersive indoor use resulting in inclusion into or onto a matrix, Wide dispersive outdoor use of processing aids in open systems, Wide dispersive indoor use of substances in closed systems

Product characteristics

Concentration of the Substance in Mixture/Article : Covers the percentage of the substance in the product up to 5%. Maximum in consumer products No hazard to the environment. Environmental exposure assessment for this scenario is not relevant.

Amount used

EU tonnage : 58000 t/a

2.2 Contributing scenario controlling consumer exposure for: PC1, PC2, PC3, PC4, PC8, PC9a, PC9b, PC9c, PC12, PC13, PC14, PC15, PC17, PC20, PC21, PC24, PC25, PC31, PC32, PC35, PC39: Adhesives, sealants, Adsorbents, Air care products, Anti-Freeze and de-icing products, Biocidal products (e.g. Disinfectants, pest control), Coatings and paints, thinners, paint removers, Fillers, putties, plasters, modelling clay, Finger paints, Fertilizers, Fuels, Metal surface treatment products, including galvanic and electroplating products, Non-metal-surface treatment products, Hydraulic fluids, Products such as pH-regulators, flocculants, precipitants, neutralization agents, Laboratory chemicals, Lubricants, greases, release products, Metal working fluids, Polishes and wax blends, Polymer preparations and compounds, Washing and cleaning products (including solvent based products), Cosmetics, personal care products

Product characteristics

Concentration of the Substance in Mixture/Article : Covers the percentage of the substance in the product up to 5%. Maximum in consumer products No health hazard below this concentration.

3. Exposure estimation and reference to its source

Environment

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

L(+)-Lactic Acid

Version 2.0

Revision Date: 24.07.2017

Contributing Scenario	Exposure Assessment Method	Specific conditions	Compartment	Value	Level of Exposure	RCR
	Qualitative approach used to conclude safe use.		All compartments			
Remarks: Environmental exposure assessment for this scenario is not relevant. No hazard to the environment.						

Consumers

Contributing Scenario	Exposure Assessment Method	Specific conditions	Value	Level of Exposure	RCR
	Qualitative approach used to conclude safe use.				

4. Guidance to Downstream User to evaluate whether he works inside the boundaries set by the Exposure Scenario

The immediate downstream user is required to evaluate whether the operational conditions and risk management measures described in the exposure scenario fit to his use.
If other OC/RMM are adopted, the user should ensure that risks are managed to at least equivalent levels.

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

L(+)-Lactic Acid

Version 2.0

Revision Date: 24.07.2017

1. Short title of Exposure Scenario: (Ref.: 19) Private household, with relevant subsequent service life

- Main User Groups : SU 21: Consumer uses: Private households (= general public = consumers)
- Sectors of end-use : SU 21: Consumer uses: Private households (= general public = consumers)
- Chemical product category : PC1: Adhesives, sealants
PC4: Anti-Freeze and de-icing products
PC8: Biocidal products (e.g. Disinfectants, pest control)
PC9b: Fillers, putties, plasters, modelling clay
PC9c: Finger paints
PC15: Non-metal-surface treatment products
PC20: Products such as pH-regulators, flocculants, precipitants, neutralization agents
PC24: Lubricants, greases, release products
PC31: Polishes and wax blends
PC35: Washing and cleaning products (including solvent based products)
- Article categories : AC02: Other (intended to be released): not specified
AC1: Vehicles
AC2: Machinery, mechanical appliances, electrical/ electronic articles
- Environmental Release Categories : ERC8a: Wide dispersive indoor use of processing aids in open systems
ERC8d: Wide dispersive outdoor use of processing aids in open systems
ERC8f: Wide dispersive outdoor use resulting in inclusion into or onto a matrix
ERC9a: Wide dispersive indoor use of substances in closed systems
ERC9b: Wide dispersive outdoor use of substances in closed systems
ERC10b: Wide dispersive outdoor use of long-life articles and materials with high or intended release (including abrasive processing)

2.1 Contributing scenario controlling environmental exposure for: ERC8a, ERC8d, ERC8f, ERC9a, ERC9b, ERC10b: Wide dispersive indoor use of processing aids in open systems, Wide dispersive outdoor use of processing aids in open systems, Wide dispersive outdoor use resulting in inclusion into or onto a matrix, Wide dispersive indoor use of substances in closed systems, Wide dispersive outdoor use of substances in closed systems, Wide dispersive outdoor use of long-life articles and materials with high or intended release (including abrasive processing)

Product characteristics

- Concentration of the Substance in Mixture/Article : Covers the percentage of the substance in the product up to 5%. Maximum in consumer products No hazard to the environment. Environmental exposure assessment for this scenario is not relevant.

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

L(+)-Lactic Acid

Version 2.0

Revision Date: 24.07.2017

Amount used
EU tonnage

: 58000 t/a

2.2 Contributing scenario controlling consumer exposure for: PC1, PC4, PC8, PC9b, PC9c, PC15, PC20, PC24, PC31, PC35: Adhesives, sealants, Anti-Freeze and de-icing products, Biocidal products (e.g. Disinfectants, pest control), Fillers, putties, plasters, modelling clay, Finger paints, Non-metal-surface treatment products, Products such as pH-regulators, flocculants, precipitants, neutralization agents, Lubricants, greases, release products, Polishes and wax blends, Washing and cleaning products (including solvent based products)

Product (article) characteristic

Concentration of the Substance in Mixture/Article : Covers the percentage of the substance in the product up to 5%. Maximum in consumer products No health hazard below this concentration.

3. Exposure estimation and reference to its source

Environment

Contributing Scenario	Exposure Assessment Method	Specific conditions	Compartment	Value	Level of Exposure	RCR
	Qualitative approach used to conclude safe use.		All compartments			

Remarks: Environmental exposure assessment for this scenario is not relevant.
No hazard to the environment.

Consumers

Contributing Scenario	Exposure Assessment Method	Specific conditions	Value	Level of Exposure	RCR
	Qualitative approach used to conclude safe use.				

4. Guidance to Downstream User to evaluate whether he works inside the boundaries set by the Exposure Scenario

The immediate downstream user is required to evaluate whether the operational conditions and risk management measures described in the exposure scenario fit to his use.

If other OC/RMM are adopted, the user should ensure that risks are managed to at least equivalent levels.