

Revision: 05/13/2015 Supersedes Revision: 04/14/2014

	acc	ording to Regulation (EC) No. 1907/2006 as amended by (	EC) No. 1272/2008					
	Section 1.	Identification of the Substance/Mixture and of th	e Company/Undertaking					
.1	Product Code:	10008976						
	Product Name:	WST-1 Reagent (powder)						
.2	Relevant identified uses o	f the substance or mixture and uses advised aga	ainst:					
	Relevant identified uses	For research use only, not for human or veterir	nary use.					
.3	Details of the Supplier of t	the Safety Data Sheet:						
	Company Name:	Cayman Chemical Company 1180 E. Ellsworth Rd.						
	Web site address:	Ann Arbor, MI 48108						
	Information:	www.caymanchem.com	1 (734)071 2225					
		Cayman Chemical Company	+1 (734)971-3335					
1.4	Emergency telephone nur		.4 (000) 404 0000					
	Emergency Contact:	CHEMTREC Within USA and Canada: CHEMTREC Outside USA and Canada:	+1 (800)424-9300 +1 (703)527-3887					
		Section 2. Hazards Identifica	ation					
2.1	<b>Classification of the Subs</b>	tance or Mixture:						
2.1.1	Classification according	to Regulation (EC) No 1272/2008 [CLP]:						
	-	Classification according to Regulation (EC) No 1272/2008 [CLP]:						
	Skin Corrosion/Irritation, Category 2 Serieus Fue Demone/Fue Irritation, Category 24							
	Serious Eve Damage/Ev							
		e Irritation, Category 2A						
	Specific Target Organ T							
	Specific Target Organ T Label Elements:	e Irritation, Category 2A oxicity (single exposure), Category 3						
2.2 2.2.1	Specific Target Organ T Label Elements:	e Irritation, Category 2A						
	Specific Target Organ T Label Elements:	e Irritation, Category 2A oxicity (single exposure), Category 3						
	Specific Target Organ T Label Elements:	e Irritation, Category 2A oxicity (single exposure), Category 3						
	Specific Target Organ T Label Elements:	e Irritation, Category 2A oxicity (single exposure), Category 3						
	Specific Target Organ T Label Elements: Labeling according to Re	e Irritation, Category 2A oxicity (single exposure), Category 3 gulation (EC) No 1272/2008 [CLP]:						
	Specific Target Organ T Label Elements: Labeling according to Re	e Irritation, Category 2A oxicity (single exposure), Category 3						
	Specific Target Organ T Label Elements: Labeling according to Re GHS Signal Word: GHS Hazard Phrases:	e Irritation, Category 2A oxicity (single exposure), Category 3 gulation (EC) No 1272/2008 [CLP]: Warning						
	Specific Target Organ T Label Elements: Labeling according to Re GHS Signal Word: GHS Hazard Phrases: H315: Causes skin irritation	e Irritation, Category 2A oxicity (single exposure), Category 3 gulation (EC) No 1272/2008 [CLP]: Warning						
	Specific Target Organ T Label Elements: Labeling according to Re GHS Signal Word: GHS Hazard Phrases: H315: Causes skin irritation H319: Causes serious even	e Irritation, Category 2A oxicity (single exposure), Category 3 gulation (EC) No 1272/2008 [CLP]: Warning on.						
	Specific Target Organ T Label Elements: Labeling according to Re GHS Signal Word: GHS Hazard Phrases: H315: Causes skin irritation H319: Causes serious eye H335: May cause respirat	e Irritation, Category 2A oxicity (single exposure), Category 3 gulation (EC) No 1272/2008 [CLP]: Warning on. e irritation.						
	Specific Target Organ T Label Elements: Labeling according to Re GHS Signal Word: GHS Hazard Phrases: H315: Causes skin irritation H319: Causes serious eye H335: May cause respirate GHS Precaution Phrases	e Irritation, Category 2A oxicity (single exposure), Category 3 gulation (EC) No 1272/2008 [CLP]: Warning on. e irritation. e irritation. s:						
	Specific Target Organ T Label Elements: Labeling according to Re GHS Signal Word: GHS Hazard Phrases: H315: Causes skin irritation H319: Causes serious eye H335: May cause respirate GHS Precaution Phrases P264: Wash {hands} thore	e Irritation, Category 2A oxicity (single exposure), Category 3 gulation (EC) No 1272/2008 [CLP]: Warning on. e irritation. e irritation. s: oughly after handling.	201					
	Specific Target Organ T Label Elements: Labeling according to Re GHS Signal Word: GHS Hazard Phrases: H315: Causes skin irritation H319: Causes serious eye H335: May cause respirate GHS Precaution Phrases P264: Wash {hands} thorow P280: Wear {protective gl	e Irritation, Category 2A oxicity (single exposure), Category 3 gulation (EC) No 1272/2008 [CLP]: Warning on. e irritation. ory irritation. s: pughly after handling. oves/protective clothing/eye protection/face protectio	on}.					
	Specific Target Organ T Label Elements: Labeling according to Re GHS Signal Word: GHS Hazard Phrases: H315: Causes skin irritation H319: Causes serious even H335: May cause respirat GHS Precaution Phrases P264: Wash {hands} thorow P280: Wear {protective gl P362+364: Take off contaction	e Irritation, Category 2A oxicity (single exposure), Category 3 gulation (EC) No 1272/2008 [CLP]: Warning on. e irritation. cory irritation. s: pughly after handling. oves/protective clothing/eye protection/face protection minated clothing and wash it before reuse.	on}.					
	Specific Target Organ T Label Elements: Labeling according to Re GHS Signal Word: GHS Hazard Phrases: H315: Causes skin irritation H319: Causes serious eye H335: May cause respirate GHS Precaution Phrases P264: Wash {hands} thorow P280: Wear {protective gl P362+364: Take off conta P261: Avoid breathing {du	e Irritation, Category 2A oxicity (single exposure), Category 3 gulation (EC) No 1272/2008 [CLP]: Warning on. e irritation. e irritation. s: pughly after handling. oves/protective clothing/eye protection/face protection iminated clothing and wash it before reuse. ust/fume/gas/mist/vapours/spray}.	on}.					
	Specific Target Organ T Label Elements: Labeling according to Re GHS Signal Word: GHS Hazard Phrases: H315: Causes skin irritation H319: Causes serious even H335: May cause respirat GHS Precaution Phrases P264: Wash {hands} thorow P280: Wear {protective gl P362+364: Take off conta P261: Avoid breathing {du GHS Response Phrases	e Irritation, Category 2A oxicity (single exposure), Category 3 gulation (EC) No 1272/2008 [CLP]: Warning on. e irritation. e irritation. e irritation. scry irritation. s: pughly after handling. oves/protective clothing/eye protection/face protection innated clothing and wash it before reuse. ust/fume/gas/mist/vapours/spray}.	on}.					
	Specific Target Organ T Label Elements: Labeling according to Re GHS Signal Word: GHS Hazard Phrases: H315: Causes skin irritation H319: Causes serious eye H335: May cause respirate GHS Precaution Phrases P264: Wash {hands} thorow P280: Wear {protective gl P362+364: Take off contact P261: Avoid breathing {du GHS Response Phrases P302+352: IF ON SKIN: V	e Irritation, Category 2A oxicity (single exposure), Category 3 gulation (EC) No 1272/2008 [CLP]: Warning on. e irritation. e irritation. sr: pughly after handling. oves/protective clothing/eye protection/face protection uninated clothing and wash it before reuse. ust/fume/gas/mist/vapours/spray}. : Wash with plenty of soap and water.	on}.					
	Specific Target Organ T Label Elements: Labeling according to Re GHS Signal Word: GHS Hazard Phrases: H315: Causes skin irritation H319: Causes serious eye H335: May cause respirate GHS Precaution Phrases P264: Wash {hands} thorow P280: Wear {protective gl P362+364: Take off conta P261: Avoid breathing {du GHS Response Phrases P302+352: IF ON SKIN: W P332+313: If skin irritation	e Irritation, Category 2A oxicity (single exposure), Category 3 gulation (EC) No 1272/2008 [CLP]: Warning on. e irritation. ory irritation. s: bughly after handling. oves/protective clothing/eye protection/face protection minated clothing and wash it before reuse. ust/fume/gas/mist/vapours/spray}. : Nash with plenty of soap and water. n occurs, get medical advice/attention.						
	Specific Target Organ T Label Elements: Labeling according to Re GHS Signal Word: GHS Hazard Phrases: H315: Causes skin irritation H319: Causes serious even H335: May cause respirat GHS Precaution Phrases P264: Wash {hands} thoro P280: Wear {protective gl P362+364: Take off conta P261: Avoid breathing {du GHS Response Phrases P302+352: IF ON SKIN: W P332+313: If skin irritation P305+351+338: IF IN EY	e Irritation, Category 2A oxicity (single exposure), Category 3 gulation (EC) No 1272/2008 [CLP]: Warning on. e irritation. e irritation. sr: pughly after handling. oves/protective clothing/eye protection/face protection uninated clothing and wash it before reuse. ust/fume/gas/mist/vapours/spray}. : Wash with plenty of soap and water.						
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	Specific Target Organ T Label Elements: Labeling according to Re GHS Signal Word: GHS Hazard Phrases: H315: Causes skin irritation H319: Causes serious even H335: May cause respirat GHS Precaution Phrases P264: Wash {hands} thoro P280: Wear {protective gl P362+364: Take off conta P261: Avoid breathing {du GHS Response Phrases P302+352: IF ON SKIN: M P332+313: If skin irritation P305+351+338: IF IN EY to do. Continue rinsing. P337+313: If eye irritation	e Irritation, Category 2A oxicity (single exposure), Category 3 gulation (EC) No 1272/2008 [CLP]: Warning on. e irritation. e irritation. e irritation. scory irritation. s: bughly after handling. oves/protective clothing/eye protection/face protection iminated clothing and wash it before reuse. ust/fume/gas/mist/vapours/spray}. : Wash with plenty of soap and water. n occurs, get medical advice/attention. ES: Rinse cautiously with water for several minutes.	Remove contact lenses, if present and easy					
	Specific Target Organ T Label Elements: Labeling according to Re GHS Signal Word: GHS Hazard Phrases: H315: Causes skin irritation H319: Causes serious eye H335: May cause respirat GHS Precaution Phrases P264: Wash {hands} thorow P280: Wear {protective gl P362+364: Take off conta P261: Avoid breathing {du GHS Response Phrases P302+352: IF ON SKIN: W P332+313: If skin irritation P305+351+338: IF IN EYE to do. Continue rinsing. P304+340: IF INHALED:	e Irritation, Category 2A oxicity (single exposure), Category 3 gulation (EC) No 1272/2008 [CLP]: Warning on. e irritation. e irritation. scry irritation. s: bughly after handling. oves/protective clothing/eye protection/face protection iminated clothing and wash it before reuse. ust/fume/gas/mist/vapours/spray}. : Wash with plenty of soap and water. n occurs, get medical advice/attention. ES: Rinse cautiously with water for several minutes.	Remove contact lenses, if present and easy					



Revision: 05/13/2015 Supersedes Revision: 04/14/2014

GHS Storage and Disposal Phrases:

 Please refer to Section 7 for Storage and Section 13 for Disposal information.

 2.3
 Adverse Human Health
 Causes skin irritation.

 Effects and Symptoms:
 Causes serious eye irritation.

 Material is irritating to the mucous membranes and upper respiratory tract.

 May be harmful by inhalation, ingestion, or skin absorption.

 May cause respiratory irritation.

 To the best of our knowledge, the toxicological properties have not been thoroughly investigated.

# Section 3. Composition/Information on Ingredients

CAS # / RTECS #	Hazardous Components (Chemical Name)/ REACH Registration No.	Concentration	EC No./ EC Index No.	GHS Classification
150849-52-8 NA	WST-1	100.0 %	NA	Skin Corr. 2: H315 Eye Damage 2: H319 STOT (SE) 3: H335

S	Section 4.	First Aid Measures

4.1	Description of First Aid					
	Measures:					
	In Case of Inhalation:	Remove to fresh air. If not breathing, give artificial respiration or give oxygen by trained personnel. Get immediate medical attention.				
	In Case of Skin Contact:	Immediately wash skin with soap and plenty of water for at least 15 minutes. Remove contaminate clothing. Get medical attention if symptoms occur. Wash clothing before reuse.				
	In Case of Eye Contact:	Hold eyelids apart and flush eyes with plenty of water for at least 15 minutes. Have eyes examined and tested by medical personnel.				
	In Case of Ingestion:	Wash out mouth with water provided person is conscious. Never give anything by mouth to an unconscious person. Get medical attention. Do NOT induce vomiting unless directed to do so by medical personnel.				
		Section 5. Fire Fighting Measures				
5.1	Suitable Extinguishing	Use alcohol-resistant foam, carbon dioxide, water, or dry chemical spray.				
	Media:	Use water spray to cool fire-exposed containers.				
	Unsuitable Extinguishing	A solid water stream may be inefficient.				
	Media:					
5.2	Flammable Properties andNo data available.					
	Hazards:					
	Flash Pt:	No data.				
	Explosive Limits:	LEL: No data. UEL: No data.				
	Autoignition Pt:	No data.				
5.3	Fire Fighting Instructions	<b>s:</b> As in any fire, wear self-contained breathing apparatus pressure-demand (NIOSH approved or equivalent), and full protective gear to prevent contact with skin and eyes.				



	Revision:	05/13/2015
Supersedes	Revision:	04/14/2014

Pi Ei 5.2 Ei Pi	Protectiv Emerger	ve Precautions,	Section 6. Ac	aidantal Dalagaa M		
Pi Ei 5.2 Ei Pi	Protectiv Emerger			cidental Release M	easures	
Ei 6.2 Ei Pi	merger		Avoid raising and bre	eathing dust, and provide adec	juate ventilation.	
5.2 Ei Pi	-	e Equipment and		t, wear a NIOSH approved se		
P		ncy Procedures:	and appropriate pers	onal protection (rubber boots,	safety goggles, and h	eavy rubber gloves).
	<b>Environmental</b> Take steps to avoid release into the environment, if safe to do so.					
6.3 M	Precautions:					
			Contain spill and coll	· · · ·		
		ment and Cleanin	gTransfer to a chemic	al waste container for disposa	I in accordance with lo	cal regulations.
U	Jp:					
			Section 7.	Handling and Stor	age	
7.1 P	recauti	ons To Be Taken	-	fume/gas/mist/vapours/spray.		
in	n Handl	ing:	Avoid prolonged or re	peated exposure.		
7.2 P	recauti	ons To Be Taken	Keep container tightly	v closed.		
in	n Storin	g:	Store in accordance v	with information listed on the p	roduct insert.	
		Sect	ion 8. Exposu	re Controls/Persona	al Protection	
8.1 Ex	xposure	Parameters:				
CAS #		Partial Chemical	Name	Britain EH40	France VL	Europe
150849-	-52-8	WST-1		No data.	No data.	No data.
CAS #		Partial Chemical	Name	OSHA TWA	ACGIH TWA	Other Limits
150849-	-52-8	WST-1		No data.	No data.	No data.
3.2.2 P	(Ventilation etc.):       levels below recommended exposure limits.         Personal protection equipment:         Eye Protection:       Safety glasses         Protective Gloves:       Compatible chemical-resistant gloves					
		otective Clothing		loolotant glovoo		
R	Respirat	ory Equipment		pirator, as conditions warrant.		
	Specify		Do pot tako intornally			
	e Pract	-	Do not take internally Facilities storing or ut	ilizing this material should be	equipped with an ever	vash facility and a safe
	5 . 1401		shower.			
			Wash thoroughly afte	r handling.		
			No data available.			

Multi-region format



Revision: 05/13/2015 Supersedes Revision: 04/14/2014

	Section 9. Physical and Chemical Properties				
9.1	Information on Basic Physical and Chemical Properties				
	Physical States:	[]Gas []Liquid [X]Solid			
	Appearance and Odor:	A powder			
	Melting Point:	No data.			
	Boiling Point:	No data.			
	Flash Pt:	No data.			
	Evaporation Rate:	No data.			
	Flammability (solid, gas):	No data available.			
	Explosive Limits:	LEL: No data. UEL: No data.			
	Vapor Pressure (vs. Air or r	nm No data.			
	Hg):				
	Vapor Density (vs. Air = 1):	No data.			
	Specific Gravity (Water = 1)	: No data.			
	Solubility in Water:	No data.			
	Autoignition Pt:	No data.			
9.2	Other Information				
	Percent Volatile:	No data.			
		Section 10. Stability and Reactivity			
10.1	Reactivity:	No data available.			
10.2	Stability:	Jnstable [ ] Stable [ X ]			
10.3	Stability Note(s):	Stable if stored in accordance with information listed on the product insert.			
	Polymerization: V	Vill occur [ ] Will not occur [ X ]			
10.4	Conditions To Avoid:	No data available.			
10.5	Incompatibility - Materials s	trong acids			
	To Avoid: s	strong bases			
	S	trong oxidizing agents			
10.6	Hazardous c	carbon dioxide			
		carbon monoxide			
	- Jp: eddeler	odine			
		itrogen oxides			
	S	sulfur oxides			



Revision: 05/13/2015 Supersedes Revision: 04/14/2014

			Section 11. Toxico	ological Infor	mation			
11.1	<b>1.1 Information on</b> The toxicological effects of this product have not been thoroughly studied.							
	Toxicol	ogical Effects:						
CAS	#	Hazardous Com	ponents (Chemical Name)	NTP	IARC	ACGIH	OSHA	
1508	49-52-8	WST-1		n.a.	n.a.	n.a.	n.a.	
		•	Section 12. Ecol	ogical Inform	ation		r.	
12.1	Toxicity	:	Avoid release into the environm					
		Runoff from fire control or dilution water may cause pollution.						
12.2	Persiste	ence and	No data available.					
	Degrada	ability:	pility:					
12.3	Bioaccu	Imulative	No data available.					
	Potentia	al:						
12.4	Mobility	in Soil:	No data available.					
12.5	Results	of PBT and vPvB	No data available.					
	assessr	nent:						
12.6	Other ad	dverse effects:	No data available.					
			Section 13. Dispo	sal Consider	ations			
13.1	Waste D	isposal Method:	Dispose in accordance with loo	cal, state, and feder	al regulations.			
			Section 14. Trar	nsport Inform	ation			
14.1	LAND T	RANSPORT (US I		•				
		er Shipping Name:	-					
	OT Hazar		not dangerede geode.					
U	N/NA Nur	nber:						
14.1	LAND T	RANSPORT (Euro	ppean ADR/RID):					
Α		hipping Name:	Not dangerous goods.					
U	N Numbe	r:						
Н	azard Cla	ISS:						
14.3	AIR TR	ANSPORT (ICAO/I	ATA):					
IC	CAO/IATA	Shipping Name:	Not dangerous goods.					
Addit	ional Tra	nsport	Transport in accordance with	local, state, and fed	eral regulations.			
Inforr	mation:							
			Section 15. Regu	latory Inform	nation			
EPA S	SARA (Si	perfund Amendm	ents and Reauthorization Act					
CAS #	#	Hazardous Com	ponents (Chemical Name)	S. 302 (EHS)	S. 304 RQ	S. 31	B (TRI)	
1508	49-52-8	WST-1		No	No	No		
CAS	#	Hazardous Com	ponents (Chemical Name)	Other US EPA	or State Lists			
1508	49-52-8	WST-1		CAA HAP,ODC PROP.65: No	: No; CWA NPDE	S: No; TSCA	No; CA	
		•		-+				
						Ν	Iulti-region form	



Page: 6 of 6

CHIMICAL	Supersedes Revision: 04/14/2014
Regulatory Information	This SDS was prepared in accordance with 29 CFR 1910.1200 and Regulation (EC)
Statement:	No.1272/2008.
	Section 16. Other Information
Revision Date:	05/13/2015
Additional Information About	No data available.
This Product:	
Company Policy or Disclaimer:	DISCLAIMER: This information is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes.